National Flood Mitigation Data Collection Tool

The National Tool or NT

v. 2.0

User's Manual

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About the Cover

This resort complex located 200 feet from the San Carlos Bay coastline in Fort Myers Beach, Florida was elevated through a joint Federal, State of Florida, and local mitigation project. In the last two decades, seven hurricanes have caused flood and wind-related damages to the complex, resulting in nearly $100,000 in repair costs per event. The Flood Mitigation Assistance (FMA) program funded the Federal share (75%) of the elevation of six buildings within the complex. The effectiveness of the mitigation project was tested when Hurricane Charley hit Fort Myers Beach in August 2004. At that point, four of the resort buildings had been elevated. Those four buildings experienced only minimal damage and were able to stay open and functional while several nearby hotels and motels were flooded, damaged, and/or forced to close. It is estimated that approximately $200,000 in repair costs alone were avoided in 2004 because of the mitigation afforded by the elevation project. Two more buildings in the complex are scheduled to be elevated by the end of 2005.

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1. Definitions

1.1 Flood Insurance Terms

Cumulative Losses – The total value of losses on a structure during a specified period of time.

Repetitive Loss (RL) Structure – The National Flood Insurance Program (NFIP) definition is any property for which two or more flood insurance claims have been paid for more than $1,000 within any rolling 10-year period since January 1, 1978. Each RL record is identified for FEMA internal program tracking by the use of an eight-digit Repetitive Loss or Property Locator number unique to the individual record. No additional identification is provided to distinguish the various sub-categories below.

Target Group Repetitive Loss Properties – This is a subset of NFIP repetitive loss properties that have had:

- Four or more claim payments of more than $1,000 within any rolling 10-year period since January 1, 1978, and/or
- Two or more claim payments within any rolling 10-year period since January 1, 1978, that appear to equal or exceed the reported property value.

Severe Repetitive Loss Properties – A subset of Target Group Repetitive Loss Properties defined by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004. Severe Repetitive Loss Properties are the focus of a 5-year Pilot Program that was created as a component of FEMA's Flood Mitigation Assistance Program and are defined as:

- Single-family properties (consisting of 1 to 4 residences) that have incurred flood-related damage for which 4 or more separate claims payments have been made, with the amount of each claim exceeding $5,000 (building and contents) and with a cumulative amount of such payments exceeding $20,000;
- Single-family properties that that have incurred-flood related damage for which at least 2 separate claims payments have been made with the cumulative amount of such claims (building only) exceeding the value of the property; and
- Multifamily properties (5 or more residences) that have incurred flood-related damage, but the specific number and amount of claims associated with these properties will be determined by FEMA in future regulation.

1.2 NFIP Terms and Building Code/Regulatory Standards

Appurtenant Structures – Accessory structures that are not habitable, but are located on the same property as the structure of interest. Examples of appurtenances include carports, sheds, garages, and decks.

Base Flood Elevation (BFE) – The water surface elevation resulting from the base or 100-year flood (i.e., a flood that has a 1 percent chance of equaling or exceeding that level in any given year). It is commonly referred to as the 100-year flood and is the national standard used by the NFIP and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

Code Height Restrictions – Regulations, usually at the community level, that cap the height to which a structure can be built/elevated. These are mainly used in waterfront communities where coastal/riverfront views are being protected.

Compensatory Storage – Floodwater storage created to offset the effects of development in the floodplain. Some communities require a hydraulically equivalent storage volume be created for floodwaters when development has resulted in the displacement of floodwaters from part of the floodplain.

Design Flood Elevation (DFE) – Elevation to which a building is designed to provide protection from flooding. Called the DFE, it is generally referenced to the BFE and might include some level of freeboard (see definition) above the BFE for added protection.

Dry floodproofing – Measures that eliminate or reduce the potential for flood damage by keeping floodwaters out of the structure. Examples include installation of watertight shield for doors and windows, reinforcement of walls to withstand hydrostatic and hydrodynamic pressures and debris impact, and use of sealants to reduce seepage of floodwater through walls.

Flash flood – A flood that rises and falls very quickly and is usually characterized by high flow velocities. Flash floods often result from intense rainfall over a small area and can also occur in highly urbanized areas where pavements and drainage improvements speed runoff to a stream.

Flood Insurance Rate Map (FIRM) – An official map of a community, on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. The map shows the extent of the base floodplain and may also display the extent of the floodway, and BFEs.

Flood Insurance Study (FIS) - A study developed in conjunction with the FIRM. The FIS, also known as a flood elevation study, frequently contains a narrative of the flood history of a community and discusses the engineering methods used to

develop the FIRMs. The study also contains flood profiles for studied flooding sources and can be used to determine BFEs for some areas.

Freeboard – An additional amount of height included to provide a factor of safety. It is usually expressed in feet above a flood level for purposes of floodplain management.

Levee – A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to provide protection from temporary flooding.

Pre-FIRM Building – For insurance rating and floodplain management regulatory purposes, a pre-FIRM building is defined as a building constructed or substantially improved on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later. Most pre-FIRM buildings were constructed without accounting for the flood hazard.

Post-FIRM Building – For insurance rating and floodplain management regulatory purposes, a post-FIRM building is defined as a building constructed or substantially improved after December 31, 1974, or after the effective date of the initial FIRM of a community, whichever is later. A post-FIRM building is required to meet the NFIP's minimum flood protection standards in effect at the time of construction.

Substantial Damage – Damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement –Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures that have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or

(2) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

Wet floodproofing – Permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing floodwaters to enter the structure. Such measures include the design of

openings for intentional flooding of enclosed areas below the DFE, use of flood resistant building materials below the DFE, and protection of the structure and its contents (including utilities).

1.3 Property Value

Building Replacement Value – The value of a structure based on the cost of materials and labor to rebuild it.

Market Value – The value of a structure based on the estimated price for which a willing seller in the current real estate market would sell it to a willing buyer.

1.4 Stormwater Management

Detention Basin – A basin constructed to temporarily impound stormwater runoff and attenuate stormwater flows.

Retention Basin – A basin that has a permanent pool for water quality treatment. It temporarily impounds and retains a specified amount of stormwater runoff and then discharges excess runoff through a riser structure and spillway at a specified rate.

Debris flow – Floodwaters that have picked up and are carrying objects of all types (e.g., trees, automobiles, boats, storage tanks, dirt, oil, various chemicals, etc.).

Flood frequency – The probability, expressed as a percentage, that a flood of a specific size on a specific stream will be equaled or exceeded in any given year.

2. Introduction

2.1 Purpose

The National Flood Mitigation Data Collection Tool (referred to as the National Tool or NT) was developed for nationwide use to gather information about floodprone structures in order to determine potentially appropriate long-term mitigation measures. The ultimate goal of the NT is to provide a standardized, systematic approach to collecting and interpreting property data and mitigation project development.

While the focus of the NT is on data collection for repetitive loss properties, it can be used to gather information related to flood risk, building construction, and building value for any structure.

The NT is designed to encourage a comprehensive sweep for information pertinent to each structure. Data fields within the NT require information from a variety of sources, including NFIP policy information; community building, tax, and historical flood records; and field reconnaissance. Having detailed data helps to create a clearer picture of the property and its flooding issues, which is important in determining the most appropriate and cost–effective mitigation method. However, the NT can also be used for more cursory or limited data collection efforts as appropriate.

The NT also allows the user to make changes to the information that is currently recorded with the NFIP. FEMA recognizes that addresses linked to past and present claim records and NFIP policies may be vague or outdated. Similarly, past addressing practices may cause the data associated with RL properties to be linked with the wrong structure. Several RL properties have been mitigated from the 100-year flood or have been provided with a lesser degree of protection. If noted, and documented appropriately within the NT, any updated or corrected data captured may be revised by the NFIP.

2.2 Description

The NT was developed using Microsoft (MS) Access 2002 (i.e., XP); however, it was also designed to work with Access 2000 and 2003, provided that the installation is done properly for each of these systems and the system requirements are met. Appendix A – System Requirements and Installation Instructions includes system requirements and installation instructions. Although the NT can currently run in Access 2000, future versions (after version 2.0) will not be supported to run in Access 2000.For any issues with installation, a Troubleshooting section is provided as Appendix B – Troubleshooting.

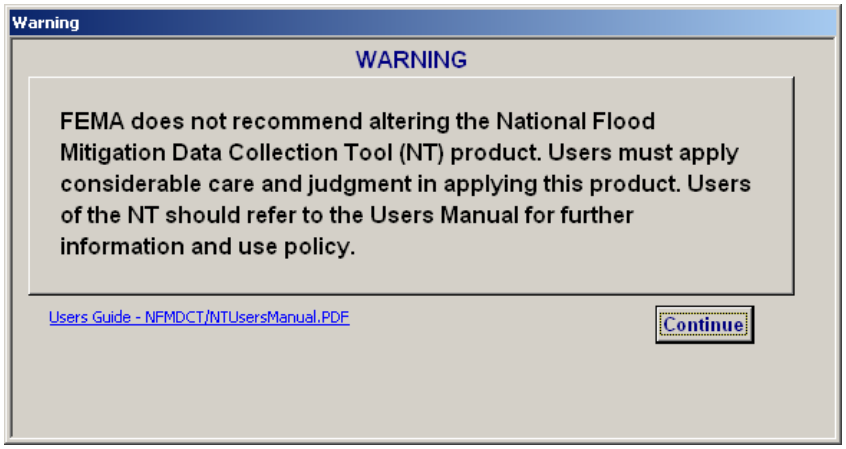
In order to use the NT in the field, it should be loaded onto a laptop to incorporate information from the field visit(s) immediately. However, data collection forms are also provided within the NT and in Appendix C – Field Data Collection Suggested

Equipment and Forms to allow for paper/hardcopy data recording in the field that can be transferred to the NT after field work is complete. A two-person team is suggested to optimize efficiency in the field. Suggested equipment for field data collection is also included in Appendix C – Field Data Collection Suggested Equipment and Forms. Once the field data collection efforts are complete and the NT has been populated, it should be provided to the appropriate FEMA Regional Repetitive Loss Coordinator for inclusion into both the Regional and National Database Repositories. A list of these coordinators is provided in Appendix D – Regional Repetitive Loss Coordinators.

The National Database Repository will be housed at FEMA Region IV. Each individual FEMA Region will serve as a Regional Repository where the populated databases will be housed and then forwarded to Region IV for inclusion in the National Database Repository. An upload site for each Region may eventually be created for field data collectors to send data to the Region's Repository via the Internet.

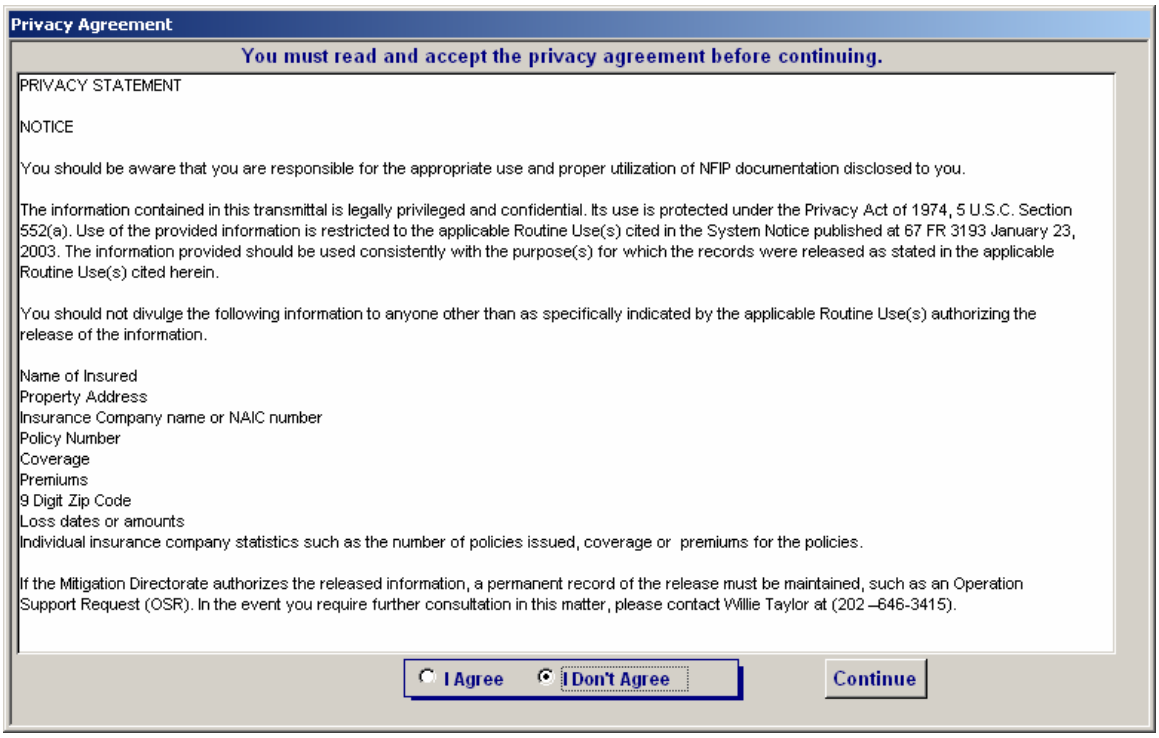
3. Warnings and Agreements

If the NT is running in MS Access 2003, when it is first opened, an MS Access security-warning window will open informing the user that the file contains code and asking if it should in fact be opened. After selecting *Open* on this window (and when first opening the NT in MS Access 2000 and 2002), a Tool Warning window will open as shown below.



This warning serves to notify users to exercise care in making any modifications to the program code and structure of the database tables within the NT. Data collected with the NT will be stored in a National Repository; changes to the structure of the NT can cause variations in the format of data leading to difficulties in storing it with and comparing it to other data. Additionally, the NT developers and FEMA Information Technology (IT) staff cannot provide technical support to users who have altered the NT. Select *Continue* once you have read the warning.

Next, a third window will open with information on a Privacy Agreement. The Privacy Act of 1974 protects most, if not all, of the information about the properties inventoried by the NT. Sharing or using any NFIP data released with the NT for purposes other than those approved for the identified category of user may be a violation of the Privacy Act and the offender will be subject to the provisions of the act. In order to access the NT, the user must acknowledge understanding this act by selecting the *I Agree* radio button and then selecting *Continue*.


Privacy Agreement
You must read and accept the privacy agreement before continuing.
PRIVACY STATEMENT
NOTICE
You should be aware that you are responsible for the appropriate use and proper utilization of NFIP documentation disclosed to you.
The information contained in this transmittal is legally privileged and confidential. Its use is protected under the Privacy Act of 1974, 5 U.S.C. Section 552(a). Use of the provided information is restricted to the applicable Routine Use(s) cited in the System Notice published at 67 FR 3193 January 23, 2003. The information provided should be used consistently with the purpose(s) for which the records were released as stated in the applicable Routine Use(s) cited herein.
You should not divulge the following information to anyone other than as specifically indicated by the applicable Routine Use(s) authorizing the release of the information.
Name of Insured
Property Address
Insurance Company name or NAIC number
Policy Number
Coverage
Premiums
9 Digit Zip Code
Loss dates or amounts
Individual insurance company statistics such as the number of policies issued, coverage or premiums for the policies.
If the Mitigation Directorate authorizes the released information, a permanent record of the release must be maintained, such as an Operation Support Request (OSR). In the event you require further consultation in this matter, please contact Willie Taylor at (202 –646-3415).
I Agree
I Don't Agree
Continue

4. Overview of Options

Once the terms of the Privacy Statement are agreed upon, the user will be led to the *National Flood Mitigation Data Collection Tool* main menu and presented with six options: *Limited Data View, Detailed Data View, Reports, Utilities, Help,* and *Exit Application*.

4.1 Limited Data View

The *Limited Data View* enables the user to enter data from a brief visual inspection of the property, limited communication with the property owner/occupant or neighbor, and basic flood risk data from the FIRM. There is also an option for the user to describe potential or pending mitigation actions. Data in the *Limited Data View* serve as the basis for all data records and should be completed prior to the collection of detailed data.

4.2 Detailed Data View

Detailed data collection is suitable when a more thorough inspection of the property and its surroundings is conducted, as well as when local or state officials are contacted for structure-specific information and coordination of on-site data collection efforts. *Limited Data View* information should also be collected and populated within the NT as part of detailed data collection efforts.

4.3 Reports

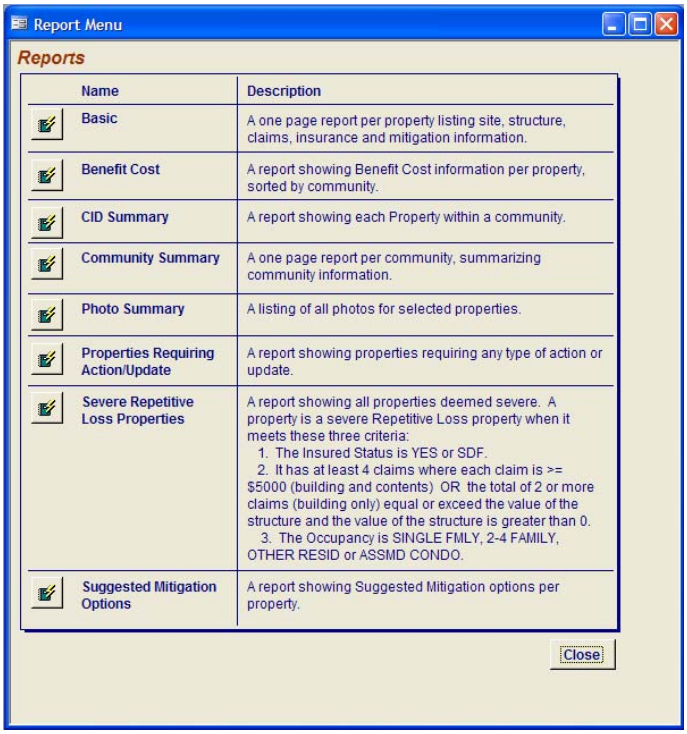
The *Reports* function allows the user to access summary reports of structure records. Reports can be accessed from the main menu or by selecting *View*/*Reports* on the top tool bar of the *Limited and Detailed Data Views*. Reports can be printed by selecting *Print* from the Print Menu or they can be saved as a separate file by selecting *Export.* A variety of formats including Microsoft Office Excel and Snapshot Format can be chosen by selecting the desired output from the *Save As Type* menu. There are currently eight types of reports available to the user.

4.3.1 Basic

This report is a one-page summary of property information for each property selected. It includes information on the site, structure, claims, insurance, and mitigation measures.

4.3.2 Benefit-Cost

This report is prepared for each selected property and contains data collected with the NT that can be used in the development of a FEMA Benefit-Cost Analysis, including property value information and flood risk data.



4.3.3 CID Summary

The Community Identification Number (CID) report provides property listings (address and Property Locator/Repetitive Loss Number) for all records in the NT for a specific community.

4.3.4 Community Summary

This report provides counts of records, by community, corresponding to properties that require updates, properties that are mitigated, flood source, and land use.

4.3.5 Photo Summary

This report shows all photographs attached to a record for the selected property.

4.3.6 Properties Requiring Action/Update

This report contains a listing of properties that require follow up action by FEMA. When the property's address needs updating, the property becomes a duplicate listing with another RL number when mitigation actions not recorded in the FEMA RL database (or recorded incorrectly) were observed and/or when claims records require updating.

4.3.7 Severe Repetitive Loss Properties

This report contains listings, including address, RL number, and claims history for those properties meeting the current severe repetitive loss property definition. However, in addition to the 1 to 4 family residences identified in the official definition, the report will also include listings for the "OTHER RESID" occupancy type found in BureauNet.

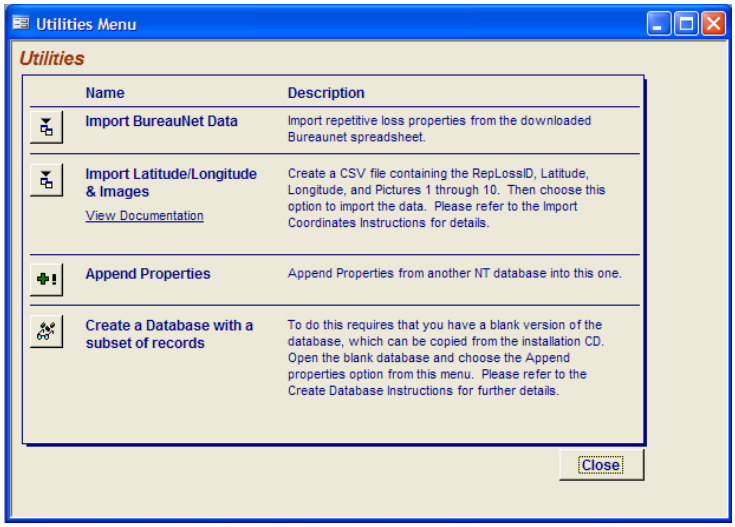
4.3.8 Suggested Mitigation Options

This report summarizes possible mitigation options for select properties as entered in the NT. For example, if the community or owner has plans to mitigate the structure and is awaiting funding, it should be noted in the *Flood Risk and*

Mitigation Possibilities/Possible Mitigation Measures section and will then be reported here.

4.4 Utilities

Four options are included in the *Utilities* menu: import BureauNet data, import property information, append properties to an existing database, or create a new database.



4.4.1 Import BureauNet Data

The *Import BureauNet Data* function allows data from BureauNet to be uploaded to the NT and used to create new records or to update information in existing records.

BureauNet is an NFIP database that stores records of all NFIP claims and policies. BureauNet data are used as a starting point to create records in the NT; when BureauNet data are imported, new records will be created for each property included in the BureauNet data that does not already have a record in the NT. Existing NT records that correspond to records in the BureauNet data being imported will have all BureauNet-populated fields overridden each time there is an import; field data captured by the NT will remain intact. BureauNet data include the address and CID of the structure, insured and claimant information, data on claims paid, and information on mitigation measures taken that have been previously captured by FEMA.

Prior to field inspections, BureauNet data for the structures of interest should be obtained from the appropriate FEMA Regional RL Coordinator in the form of a Repetitive Loss Data State/Community Drill Down, MS Excel file. The file contains records for RL structures with information on claims and, in some cases, previously captured mitigation information for the property. Regional RL Coordinators have the capability to access BureauNet and related systems to perform data queries. A list of Regional RL Coordinators is provided as Appendix D. The BureauNet Drill Down can be accessed via an internet connection in one of three ways by either FEMA personnel or, in some cases, state officials. These include the following means:

- NFIP BureauNet Website – requires login, password, and dial-up connection for direct dial into the site

- From the Main Screen, choose the *Computer Technical Systems Report* link
- Choose the *Data Look-up* link
- You will be prompted to enter the user name and password again
- From the reports page, choose *Repetitive Loss Data State/Community Drill Down*
- Choose the property type for the report (e.g., all records, mitigated records only, or non-mitigated records only) and select *Run Report*
- Each state is listed in a table with a link titled EXCEL at the end of each row
- Click on the EXCEL link to access the proper MS Excel output file

- NFIP Data Exchange System – login and password protected with access over any internet connection
  - From the FEMA Data Lookup and Drill Down page, select the Repetitive Loss Data State/Community Drill Down
  - Choose the property type for the report (e.g., all records, mitigated records only, or non-mitigated records only) and select Run Report
  - Each state is listed in a table with a link titled STATE near the end of each row
  - Click on the STATE link to access the proper MS Excel output file

- SQANet – login and password protected with access over any internet connection. Authorized state and Federal officials can request access via the following website http://nfipnextgen.com/sfr/signup.do. Directions for accessing the files including the following:
  - Choose Pilot SQANet link from NextGen website (http://nfipnextgen.com/index.html) and enter your login and password
  - From the Folders Menu in the top left corner, expand the SQANet – Repetitive Loss folder
  - Choose NFMDCT Data Import
  - You must select a display option, state, and the report property types (e.g., mitigated or unmitigated), and select Submit
  - An MS Excel icon will then be available to open and/or download the file

Before uploading the data to the NT, the following steps must be taken:

- Any records for structures that are not of interest should be deleted
- The output file must be saved as MS Excel version 5.0 or higher

When the *Import BureauNet Data* function is selected, the user will be prompted to browse to the appropriate BureauNet data output file. The NT will create new records for each property listed in the BureauNet data output file and update records already in the NT with this information. Therefore, the output file from BureauNet should contain information for structures that need new records created or structures that need address, claim, and policy data updated.

After choosing the appropriate Excel file, the next screen prompts the user to choose whether or not to continue with the data import. If *Yes* is selected, the information will be imported and records will be added. Again, this exercise should be completed prior to going out in the field.

The BureauNet Import provides key information about the structure, including the address on record, claims paid history, policy information, and information on mitigation actions. BureauNet data itself cannot be edited within the NT. However, there are opportunities within the NT to provide updated or better information back to the NFIP that can be used to update BureauNet data. There are boxes on the Address and Updates tab in the Limited Data View and on the Claims tab of the Detailed Data View to be checked if the user finds updated or more accurate data during field work and/or research that should be reported to the NFIP. Checked boxes will serve as markers that the existing information in BureauNet may need to be updated with the new data.

4.4.2 Import Latitude/Longitude and Images

This feature enables the user to import latitude and longitude coordinates as well as photographs and other images through an automated process.

a) Create an import file with a Comma Separated Values (CSV) format. One way to do this is to create a spreadsheet in Excel, populate it as described in steps b) through d), and save it as a CSV file by choosing File / Save As / Save As Type: CSV (comma delimited) (*.CSV). Row 1 of the file must contain heading labels as shown in Table 1. Each subsequent row will contain data. An example of the file is shown in Table 2.

Table 1. Heading Labels for Import File

REPLOSSID	LATITUDE	LONGITUDE	PIC1	PIC2	PIC3	PIC4	PIC5	PIC6	PIC7	PIC8	PIC9	PIC10

b) For each property, it is necessary to populate the file with a unique identifier. This identifier goes in the column labeled REPLOSSID. For repetitive loss structures, this should be the seven-digit Property Locator Number or Rep Loss ID Number. The user does not need to enter any leading zeros; if the

number entered is less than seven digits, preceding zeroes will automatically be added to bring it to a total length of seven digits. For example, 56 will become 0000056.

For structures other than repetitive losses, the REPLOSSID field should be populated with the alphanumeric identifier described in Section 6.1.1 (CID Street Address). For existing records, the REPLOSSID must match exactly with a record's current Property Locator/Repetitive Loss Number in order for the data to be associated with that record.

c) LATITUDE and LONGITUDE are numeric fields that should be formatted as decimal degrees with up to three numbers left of the decimal (and a negative sign when necessary), and six numbers to the right of the decimal (-123.123456). Note that all latitude measurements must be between -90 and 90 degrees and all longitude measurements must be within the -180 to 180 degree range.

Latitude and longitude readings can be collected by and downloaded from most handheld Global Positioning System (GPS) units. Location readings can be transcribed from the visual display on the unit for each location; however, downloading them directly into the computer may be preferred. Most GPS units on the market today come with computer attachment cables and software included or is available as an option. Once the GPS data is transferred to the computer, the entire list of GPS readings can be managed systematically and the cut and paste tools can be used to minimize the errors associated with re-typing the numbers.

Many other tools are also available for use in downloading GPS points to computers, some of which can be acquired for little or no cost. One such example for Garmin® users is a program called DNRGarmin from the Minnesota Department of Natural Resources[1] which imports and exports information between the GPS and the computer using formats compatible with Geographic Information Systems (GIS). Other products are available on the Internet that download data from other or, in some cases, many makers.

In order to get the latitude/longitude readings from the handheld GPS into a format usable for import into the NT, some user re-formatting may be necessary. To import the readings into the NT, latitude/longitude measurements must have only numeric characters, with the exception of a negative sign (-) for western longitude readings, or southern latitude readings. No directional letter symbols (N, S, E, W) should be included as part of the numbers. Additionally, the values must be in the decimal degree format, and latitude and longitude measurements should be stored in different fields and not combined as one piece of data.

[1] The program is available on-line at
http://www.dnr.state.mn.us/mis/gis/tools/arcivew/extensions/DNRGarmin/DNRGarmin.html

Examples of correct and incorrect formatting of a longitude reading are provided in Example 1.

Example 1. Longitude Reading

Decimal degrees:	-76.905791^{o}	CORRECT
Degrees-Minutes-Seconds:	76^{o}54'20.846" W	INCORRECT
Degrees-Minutes:	76^{o}54.347' W	INCORRECT

To convert degrees-minutes-seconds readings to decimal degrees, the following conversion formula is used, where DD.MM.SS.SSS represents the degrees-minutes-seconds format, and DD.DDDDDD represents the decimal degrees format.

DD + [(MM+ SS.SSS/60)/60] = DD.DDDDDD

Similarly, to convert degrees-decimal minutes readings to decimal degrees, the following conversion formula is used, where DD.MM.MMM equals the degrees-decimal minutes format, and DD.DDDDDD equals the decimal degrees format.

DD + (MM.MMM/60) = DD.DDDDDD

d) The PIC1 through PIC10 fields are text fields where the location and name of each image to be imported should be entered. Each field should contain the FULL directory path to the corresponding picture. For example, an image with the name 56_011005_01.jpg located in the <C:\program files\Images> subfolder should have the following text entered in the PIC field: C:\program files\Images\56_011005_01.jpg

In order to import latitude/longitude data or images, the REPLOSSID field must be accurately populated. You can choose to import only latitude and longitude data and no images or vice versa. You can have multiple entries (2 or more records or rows) for the same REPLOSSID if you choose to import more than 10 images. If there is more than one record for a single REPLOSSID and different latitude/longitude measurements are entered, data from the last entry in the import file will overwrite any previous entries.

Table 2 is an example of what a properly formatted file would look like in a spreadsheet.

Table 2. Example of Data Entered in a Spreadsheet

REPLOSSID	LATITUDE	LONGITUDE	PIC1	PIC2	PIC3
56	18.465047	-66.111373	C:\program files\images\56_011005_01.jpg	C:\program files\images\56_011005_02.jpg	C:\program files\images\56_011005_03.jpg
57	40.107851	-88.211601	C:\program files\images\57_011005_01.jpg	C:\program files\images\57_011005_02.jpg	
58			C:\program	C:\program	

			files\images\58_front.bmp	files\images\58_back.bmp	
59	21.328234	-157.831157			

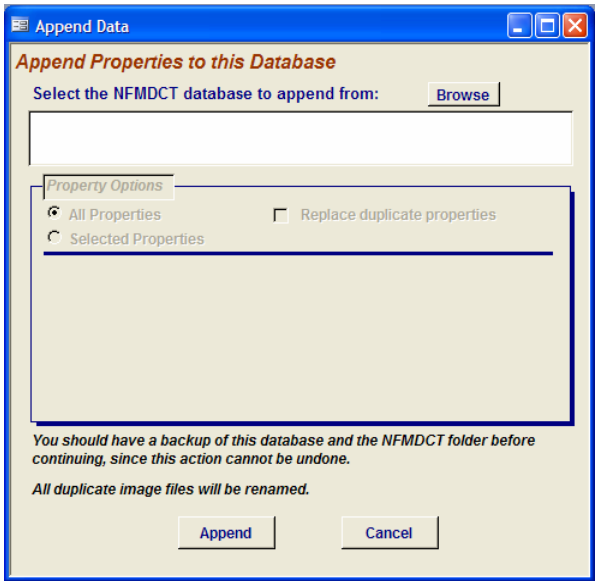
After saving the file as CSV, the output will be formatted with commas as separators and will look like this:

REPLOSSID, LATITUDE, LONGITUDE, PIC1, PIC2, PIC3, PIC4, PIC5, PIC6, PIC7, PIC8, PIC9, PIC10
56,-36.778899,-80.775566, C:\program files\images\56_011005_01.jpg, C:\program files\images\56_011005_02.jpg, C:\program files\images\56_011005_03.jpg
57,44.11223,-45.5522, C:\program files\images\57_011005_01.jpg, C:\program files\images\57_011005_02.jpg
58,,,c:\program files\images\58_front.bmp,c:\program files\images\58_back.bmp
59,35.774,80.556

Note: The data for REPLOSSID 56 in the above example would all be contained on one line in a CSV file.

4.4.3 Append Properties

This feature allows the user to attach or add properties from another database into the currently open database. Once the Append Properties selection is made, the Append Data window will open. A Browse button will allow the user to choose the database containing the records to be added. Furthermore, the user can choose to add either all or only selected properties with the option of using these records to replace any duplicate records within the currently open database.



Records from a database in Access 2002 or 2003 cannot be directly appended to an Access 2000 format database. However, Access 2002 or 2003 databases can be converted to Access 2000 format relatively easily. To convert a 2002/2003 database to 2000 format, open MS Access, and choose Tools/Database Utilities/Convert Database/To Access 2000 File Format. Then select the Access 2002/2003 database to be converted. After prompting the user to name the new file, MS Access will perform the conversion. Use this new Access 2000 format database to perform the append process.

Specific instructions for using the append feature follow:

a) Backup the NFMDCT.MDB database you are working with and the associated NFMDCT folder before continuing. The append procedure cannot be undone, so it is important to create this backup copy.

b) Use the Browse feature to select the database file containing the records/properties you want to add to the current database.

c) In the *Property Options* box, select either *All Properties* or *Selected Properties*, depending on what records you want to add to the current database.

d) The *Append Criteria* window will open if *Selected Properties* is chosen. In this window, various criteria are presented that can be queried to create a subset of records from the selected database. Enter the appropriate selection criteria for the records/properties you want to add and click OK.

e) Check the *Replace duplicate properties* box to update records in the open database with records of duplicate properties from the database being used to append.

f) Select Append to continue, and a status screen will display the progress of the append process. When it is complete, you can view and print the report.

4.4.4 Create a Database with a Subset of Records

This feature allows the user to create a new database with a subset of records from an existing database. This might be necessary in order to provide a community with a database containing only their community's records. The *Create a database with a subset of records* on the utilities menu only links the user to instructions and cannot in and of itself be used to create the new database. To create a new database, the user must open an empty NT MDB file and use the *Append Properties* feature to add existing records to it.

When providing a database to a new user, make certain that he or she has a copy of the NT installation CD and the capability to run the NT on one or more computers (see Appendix A – System Requirements and Installation Instructions). Also, if you are unsure whether the new user has Access 2000 or Access 2002/2003 capabilities, it is best to provide the database in both formats. Access 2002/2003 databases can be converted to Access 2000 format. Refer to instructions in Section 4.4.3.

To create a new database:

a) Copy the NT database that contains the properties for the community and the NFMDCT folder to a CD, memory card, or a location on the community's network, if available. You will need to access this database from the community's PC in step c).

The NT database and the NFMDCT folder, which contains the images and documents for the database, are located in the C:\Program Files\NFMDCT

folder. The NT database and the NFMDCT folder must remain together at all times.

b) Install the National Tool to the community's PC by using the NT Installation CD. Refer to the installation instructions in Appendix A – System Requirements and Installation Instructions for more information.

c) From the community's PC

   i. Open the NT database by selecting: Start / Programs / NFMDCT

   ii. Select the *Utilities* button from the menu

   iii. Select the *Append Properties* button

   iv. On the Append Properties to this Database screen, browse to the NT database that contains the properties for the community (*This is the database that was copied in step a)*

   v. In the *Property Options* section of this screen, click on *Selected Properties* and the Append Criteria screen displays. Enter the criteria for the properties you would like to copy. For example, Community name contains "Karylbrook" or CID = 000123, etc. When you are done with your criteria, click OK to return to the Append Properties to this Database screen.

   vi. Click the *Append* button and the properties, their images and the documents will be copied to the community PC's database

   When the append process is complete, the properties, their images and the documents have been successfully copied to the C:\Program Files\NFMDCT folder. You can remove the CD, memory stick, or files that were copied in step a).

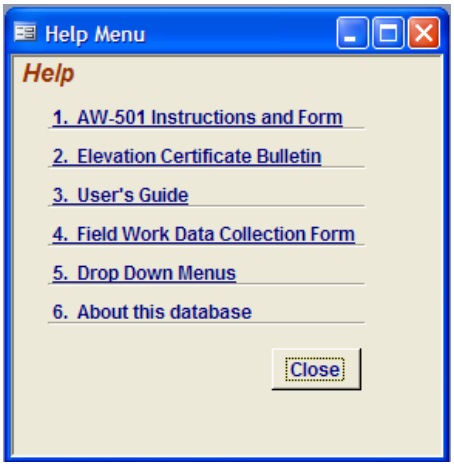
Alternative methods may be used to create a subset of records on another computer, but this is the preferred method. Refer to Section 4.4.3 for further instructions on the Append process.

4.5 Help

The *Help* button on the Main Menu opens a separate *Help Menu* where there are links to several support documents in PDF format[2], including the AW-501 form and instructions, FEMA's Elevation Certificate Bulletin, and this User's Manual.

[2] Note that Adobe Reader 7.0 has a known bug where it will not display PDF documents when they are linked from a Microsoft Office document such as an Access database. You will need Adobe Reader 6.0 to use the links to the PDF documents.

Also included are forms to use in the Field for Data Collection, and drop down menus providing selections to use on the field forms. These documents are stored in the NFMDCT subfolder. Use the links on this menu to reference these documents or print hard copies. Information about the database, including its location on the PC and the versions of the NT and MS Access, is provided by selecting *About this database*.



4.6 Exit Application

The *Exit Application* feature closes the NT and exits out of Microsoft Access.

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5. Data Gathering

Specific property information that is not imported from BureauNet should be obtained during the field inspection, from the FIS, local officials, and other sources. Coordination with the community prior to field deployment is imperative, particularly when detailed data are being collected for a structure.

Prior to conducting the field inspection visit, the NT user should contact the appropriate local official to inform them of the planned fieldwork and to obtain information. Depending on the size of the community, there may be more than one official or agency where important information may be obtained. The following section highlights the offices or agencies within a community that may have relevant information.

5.1 Community Contacts

There are several community agencies that may have relevant information needed for a complete data collection effort. They include the Engineering or Public Works Department, Building Official or Code Enforcement Department, and the Tax Assessor's Office. Following is a list of information that may be collected from each of these community agencies:

Engineering or Public Works Department

1. Historical Flooding
    a. Dates
    b. Recurrence interval with documentation
    c. Extent of damage within community
2. Flood Protection Projects
    a. Pending or completed
    b. Description and agency ownership
    c. Level of protection provided (recurrence interval)
    d. Date (or anticipated date) of completion
    e. Flood events since project completed

Building Official/Department

1. Permit Records
    a. Structure and site elevation information
    b. Post-flood repairs, including amount and type of damage
    c. Mitigation projects
2. Regulations
    a. Floodplain ordinance (higher regulatory standards such as freeboard)

b. Height restrictions
c. Compensatory storage

Tax Assessor's Office

1. Tax ID and Parcel Number and/or Group 1 address
2. Assessed Value of Structure and Lot
3. Estimated Market Value of Structure and Lot (if available)

5.2 Field Data Collection

During field data collection there is a possibility of meeting owners or neighbors interested in the purpose of the fieldwork. It is mandatory for field crews to carry proper identification at all times. If windshield type surveys are being conducted, prior notification of owners may not be necessary.

Appendix F –Site Data Collection Notification and/or Explanation Letters contains a sample letter to notify owners/occupants which can be modified for notification of state or local officials. A second letter is also included that should be carried by FEMA employees or FEMA contractors doing fieldwork to alleviate any concerns from interested parties, such as property owners, who may have questions about the data collection efforts. A third letter is included in the appendix as a sample for local official use. This letter can be modified as necessary and either mailed to property owners prior to field work, or used by community employees or contractors during site inspection.

6. Data Collection with the NT

The NT categorizes most data according to whether it falls in the *Limited Data View*, or the *Detailed Data View*. In addition to recording information for existing records within these views, new records can also be created in the *Limited Data View*.

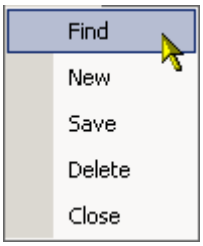
To access an existing data record or create a new one, you will need to first choose either the *Limited* or *Detailed Data View* option from the main screen. Once in this section, you will see that in addition to the data recording pages within the views, there are also functions that can be accessed via the top tool bar.

6.1 Top Tool Bar Functions

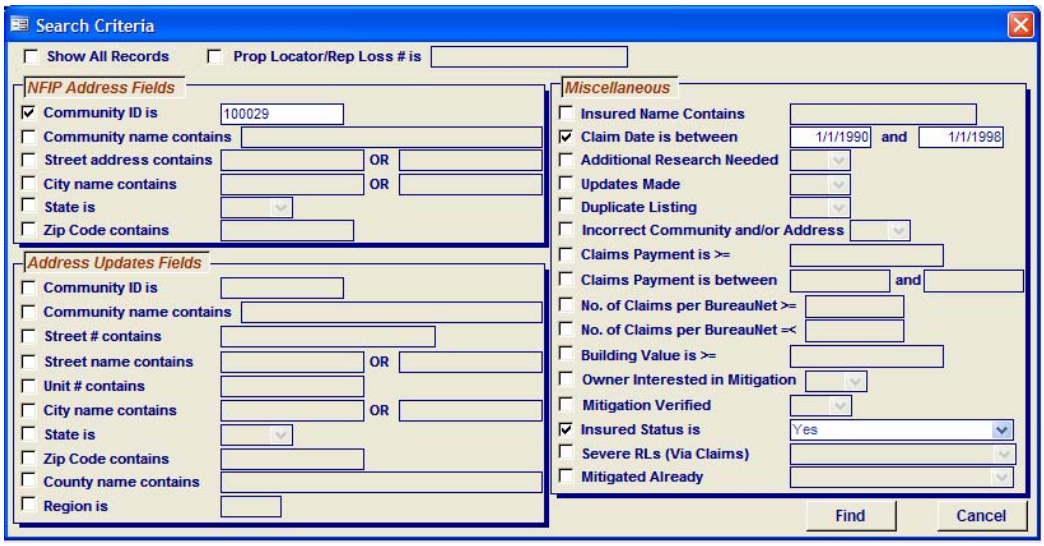
There are three buttons with drop down menus along the Top Tool Bar: File, View, and Help. Under each drop down, there are several functions and/or options.

6.1.1 File

There are five functions available under the File menu: Find, New, Save, Delete, and Close.



Find - The *Find* function is used to retrieve an existing record or records that meet certain criteria. The *Find* function allows for a search of records by inserting the RL number as well as several other criteria. In the *NFIP Address Fields* section, information such as the NFIP CID, the community name, or parts of an address can be entered to perform a search. This search is performed on data from BureauNet that has been uploaded to the NT.



In the *Address Updates Fields* section, information entered by the NT user to update or correct address and community information can be queried.

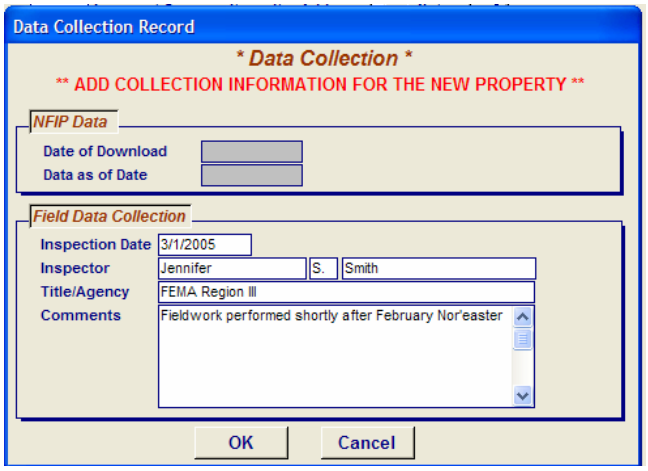
Other criteria listed under *Miscellaneous* may be used to locate a property such as: approximate claim period, claim amount, number of claims payments[3], building value, incorrect address, and whether or not a mitigation action has been utilized.

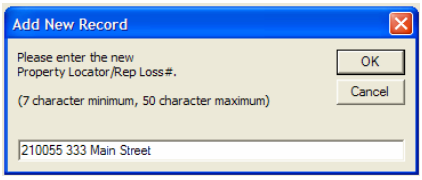
All the records matching the search criteria will be opened. The arrow keys on the bottom left of the screen may be used to move from one record to another. The Page Up and Page Down keys may be used to move to the previous and next records, respectively. The Home key can be used to access the first record, and the End key can be used to access the last record.

New – The *New* selection is used to create a new record. Generally, new records will be created within the *Limited Data View* for properties that are not RLs. Records for RL properties should be created through the *Import BureauNet Data* function. When the *New* key is selected, the *Data Collection Record* window will open. The user must complete the Inspection Date, Inspector, and Title/Agency fields in order to create the record. After this information is entered and OK is selected, the user will also be prompted to assign a Property Locator number to the record. For non-RL properties, the convention for this naming includes the six-digit CID followed by the street address not to exceed 50 characters total. For example, in the City of Hopkinsville, Kentucky, where the CID is 210055, the Property Locator number for 333 Main Street would be 210055 333 Main St. There should be no apostrophes or quotes used in the Property Locator Number. After assigning a Property Locator number and choosing *OK*, a new blank record

[3] This field will be set to "Unknown" if data is appended to NT v. 2.0 from an earlier version, or if a new record is added outside of the BureauNet import process. To populate the field, import the newest BureauNet download.

will be available. If a Property Locator number more than 50 characters is chosen, there will be an error message.





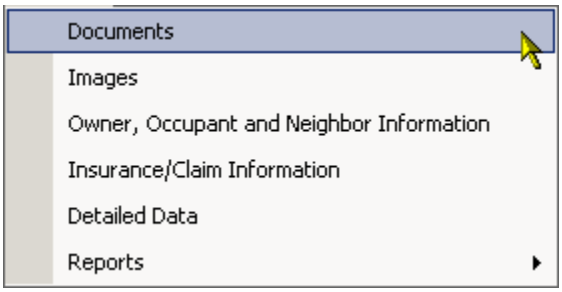
Save – Saving data is done with this key. Each time you enter a record, the first time data is saved for the property, the user will be prompted with the *Data Collection Record* window. If the *Field Data* has not yet been entered, it will need to be completed the first time a record is saved. The fields *Date of Download* and *Data as of Date* correspond to BureauNet data that have been imported and will be automatically populated during an import; they cannot be manually entered or edited. Users will be prompted to save records when entering data if they make changes, toggle between the *Limited Data* and *Detailed Data Views*, or move from one record to another. This will happen each time a record is opened and edited. *Note: The data in the most recently modified box will not be saved unless you tab or click out of the box before saving. You must click out of the most recently modified data entry box before pressing save.*

Delete – This function is used to delete individual records and must be used when the record is open. After choosing delete, a window will open where the user must confirm the deletion of the record.

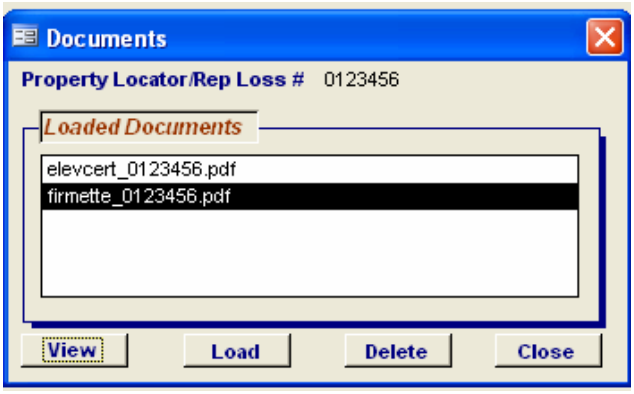
Close – This will close the records and return the user to the Main Menu. If data have been edited, but not saved, choosing Close will prompt a window asking if the user wants to save changes.

6.1.2 View

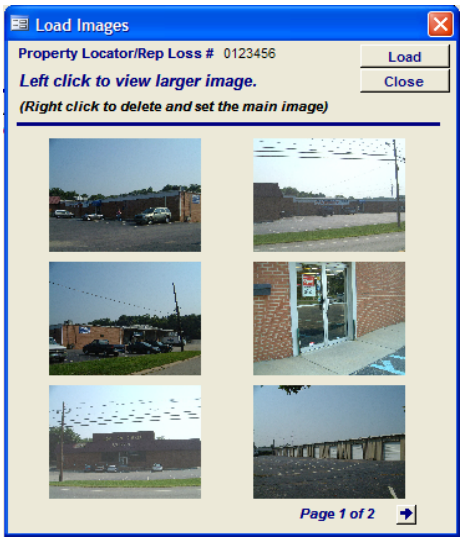
There are six options under the drop down menu for View: Documents; Images; Owner, Occupant and Neighbor Information; Insurance/Claim Information; Limited/Detailed Data; and Reports.



Documents – The *Documents* feature provides an interface for loading and viewing documentation attached to individual records. Such documentation might include a copy of an Elevation Certificate, a FIRMette with the property location marked, or information about pending mitigation projects (project description, cost estimate, etc.). To insert a document, click Load, browse to the desired file, and select it. To view an attached document, select it from the list and choose *View* as shown in the image below. Similarly, highlighting the file name and selecting *Delete* will delete documents.



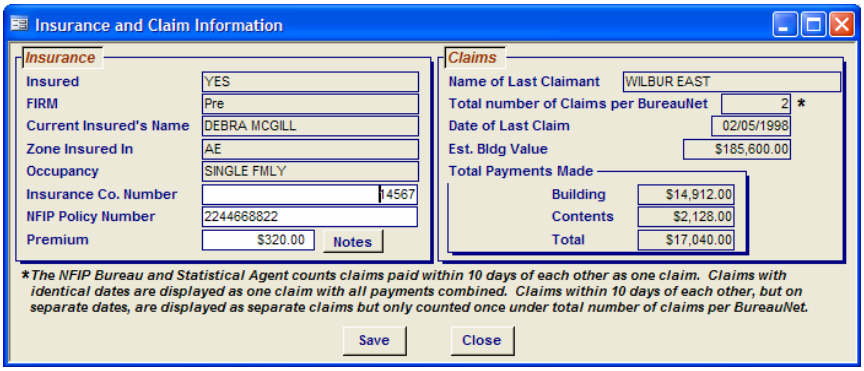
Images – The *Images* feature provides an interface for loading and viewing images that may be stored with the record. To insert an image, click Load then select the appropriate graphics file from the *Locate Files* window. A thumbnail of the image will be displayed in the *Load Images* window. The *Load Images* window displays up to six thumbnails at a time. Once a file has been loaded, it can be set as the main image or deleted by right clicking on it (by default, the main image will be the first image loaded). After closing out of the *Load Images* window, the main image will appear as a thumbnail in the upper right portion of the Limited Data View if the *View thumbnail image* box is checked. A full size image can be displayed by clicking on the thumbnail. The thumbnail image will be closed by selecting exit (the X in the upper



right corner). It will reappear if you leave the record and return. The main image is also the image displayed on the basic report.

Owner, Occupant, and Neighbor Information – Fields in this window should be completed if there was communication with the owner, occupant, or a neighbor as part of the data collection efforts. Dates of contact as well as names and phone numbers should be entered. Additionally, if the owner was contacted, it should be indicated whether or not he or she expressed an interest in mitigating the structure.

Insurance/Claim Information – This feature provides information on the insurance policy and allows the user to enter additional information as well. The *Insurance* section indicates whether the structure is insured, whether it is insured as either pre- or post-FIRM, the current insured's name, the zone it's insured in, and the occupancy type. All of this insurance information comes from the BureauNet download. Additional fields where the NT user can enter information are unshaded and include the insurance company number, policy number, and the premium paid. The *Claims* section shows information from BureauNet and includes the name of the last claimant, the total number of claims per BureauNet, the date of the last claim, the estimated building value, and total payments made for the property (both building and contents). There is a note here that indicates that, for the *Total number of claims per BureauNet*, the NFIP Bureau and Statistical Agent has counted claims paid within 10 days of each other as one claim. Claims with identical dates are displayed as one claim with all payments combined. Claims within 10 days of each other, but on separate dates, are displayed as separate claims (see Claims Tab) but only counted once under total number of claims per BureauNet.



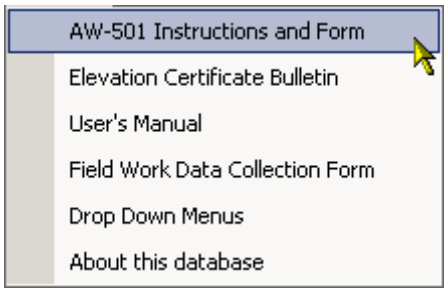
Limited/Detailed Data – This feature enables the user to toggle back and forth between the Limited and Detailed Data Views.

Reports – This feature allows the user to access the reports while in the Data Views. The same report options are available here as were described in Section 4.3 of this guide. In addition, here you also have the capability to run the reports just for the properties that have been selected through the Find feature.

6.1.3 Help

The *Help* drop down menu provides access to useful reference documents, including the following:

- AW-501 Instructions and Form,
- Elevation Certificate Bulletin,
- the User's Manual, and
- Field Work Data Collection Forms and corresponding Drop Down Menus



Additionally, the *About this database* feature identifies the version of the NT and the version of Microsoft Access that is running.

6.2 Limited Data View

Within the data collection portion of the NT, there are three page/tabs for data entry under the Limited Data View:

1. Address and Updates
2. Site Observations
3. Flood Risk and Mitigation Possibilities

6.2.1 Address and Updates Tab

6.2.1.1 NFIP Address

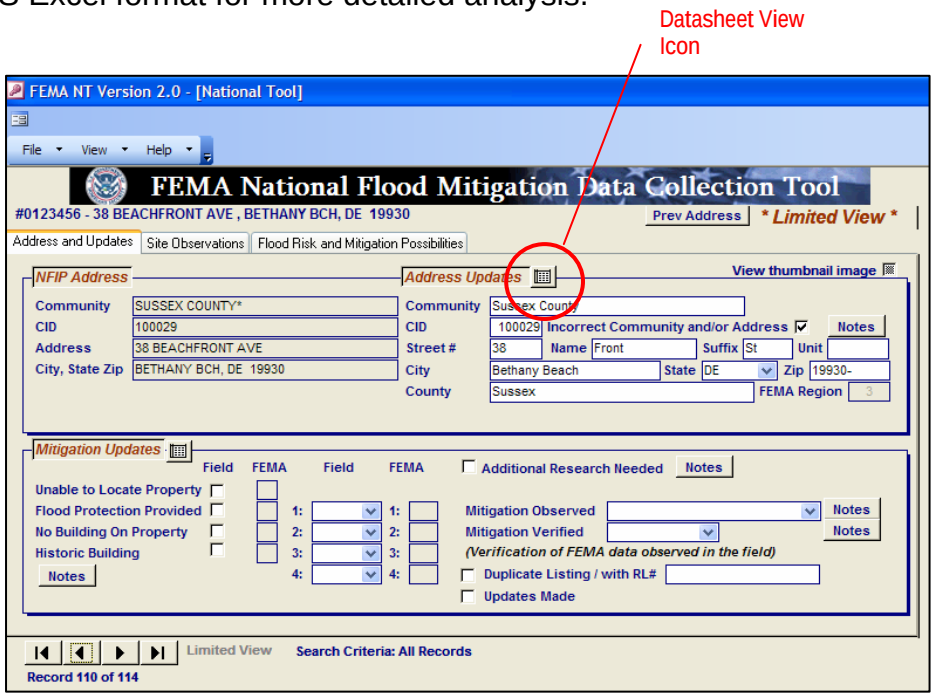
The NFIP Address section is populated by importing information from the BureauNet Import and represents the address information currently associated with the property. If the address has been modified from an earlier listing, the previous address will also be imported and can be viewed by pressing the *Previous Address* button on the top right of the screen. All of the information imported from BureauNet is for reference only and cannot be edited, thus, these fields are "grayed out."

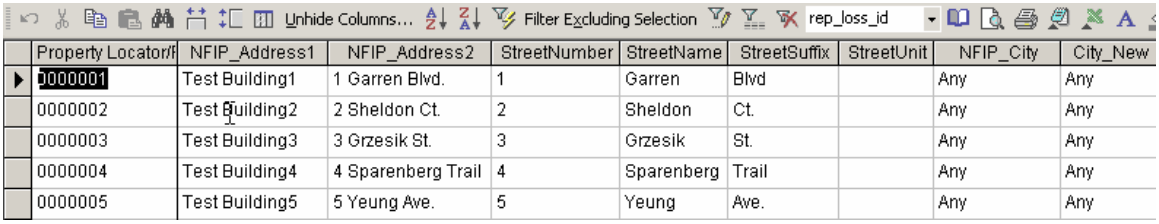
6.2.1.2 Address Updates

The address updates section allows the user to update data from the BureauNet Import as necessary to facilitate easier searches for records within the NT. Additionally, if there are cosmetic errors with the address from BureauNet, or if

the user determines that the RL record is currently assigned to the wrong community, the address information may be corrected here. If updated data are provided, the user must select the incorrect community and/or address box. There is also a Notes button that will open a window where the user can enter more information about the property location or directions to the property.

This is the first section for which a datasheet view icon is present indicating that the user can also see the data contained in this section for all of the currently selected records within a datasheet view. This allows users to change the same piece of information for multiple records at the same time or to compare data between different structures. Also, information from these views can be exported into MS Excel format for more detailed analysis.





Property Locator/F	NFIP_Address1	NFIP_Address2	StreetNumber	StreetName	StreetSuffix	StreetUnit	NFIP_City	City_New
0000001	Test Building1	1 Garren Blvd.	1	Garren	Blvd		Any	Any
0000002	Test Building2	2 Sheldon Ct.	2	Sheldon	Ct.		Any	Any
0000003	Test Building3	3 Grzesik St.	3	Grzesik	St.		Any	Any
0000004	Test Building4	4 Sparenberg Trail	4	Sparenberg	Trail		Any	Any
0000005	Test Building5	5 Yeung Ave.	5	Yeung	Ave.		Any	Any

6.2.1.3 Mitigation Updates

A datasheet view icon is available if data in this section needs to be viewed or edited for multiple records. Four mitigation categories are listed in the first column of this section. The two columns with the FEMA header located adjacent to the categories (unable to locate property, flood protection provided, no building on property, and historic building) will be populated from the BureauNet Data import;

the "grayed out" boxes represent BureauNet information that cannot be manipulated by the user once the BureauNet data have been uploaded. The user will complete the two columns with the Field header where appropriate based on field observations and the data collected.

The user must assess whether or not any of the four mitigation categories apply to the structure and if the corresponding FEMA data are accurate. Coordination with state or local officials may be necessary to obtain documentation required to support the findings. The boxes across the four "mitigated" categories correspond to the data in BureauNet that FEMA has on record for the structure. The four numbered boxes correspond to codes for different mitigation actions and mitigation funding sources. These mitigation action and funding source codes can also be found on the NFIP Repetitive Loss Update Worksheet (AW-501). A sample AW-501 form is provided in Appendix G. Boxes 1 and 2 list the mitigation actions and boxes 3 and 4 list the primary and secondary funding sources, respectively. Boxes 1 and 2 are lined up with the "mitigated" categories to which the action codes apply – flood protection provided and no building on property. Following is a description of how to complete this section.

- *Unable to Locate* – If the FEMA box is checked, the NFIP data indicate this structure could not be located. If, during the field visit, the structure cannot be located, the user should check the corresponding field box. A note should be added to identify the steps taken to locate the property and identify the nature of the address deficiency.

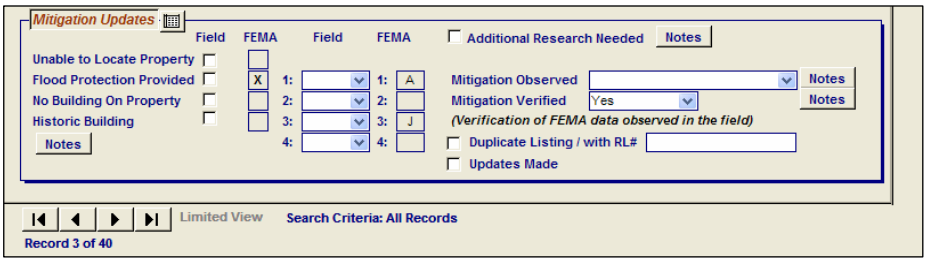
- *Flood Protection Provided* – If some sort of retrofitting measure has been completed to protect the property from flood damage, the box should be checked. If not, the box should remain unchecked.
    - If the box is checked, choose from action codes A through F from the pull down menu labeled Box 1, corresponding to the type of protection provided (elevation, floodproofing, stormwater management, flood control project).
    - Boxes 3 and 4 should be used to indicate the primary source of funding and the secondary source of any known additional funding, respectively.

- *No Building on Property*
    - If the box is checked, choose from action codes G through I from the pull down menu labeled Box 2, detailing whether the building was acquired and/or demolished or relocated.
    - Boxes 3 and 4 should be used to indicate the primary source of funding and the secondary source of any known additional funding, respectively.

- *Historic Building* – If the FEMA box is checked, the structure has been determined to be a historic structure either listed on the National Register of Historic Properties or on a similar state register. If during the field visit it is determined that the structure is listed on the National Register or a State Register, the *Field* box should be checked. Structures eligible for the National Register or a State Register also qualify for special consideration by the NFIP. If a structure seems potentially eligible for inclusion on one of these registers, this should be noted in the *Notes* section.

  Note: A Historic Building is not an equivalent designation to buildings that are within a Historic District. An individual historic property or structure derives its significance from being associated with important historical events, persons, or a distinctive architectural style, in comparison to a district, which derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or can be an arrangement of historically or functionally related properties. For example, a district can also encompass several interrelated activities, such as industrial, residential, or commercial buildings or could contain buildings, structures, sites, objects, or open spaces that do not contribute to its historic significance.

In the example below, according to NFIP records, the property has been mitigated via a flood protection measure. The A in Box 1 indicates that the structure was elevated to or above the BFE, and the J in Box 3 notes that the Hazard Mitigation Grant Program (HMGP) served as the primary funding source. As previously mentioned, these codes are defined in the drop downs under the field boxes and correspond to the codes found on the second page of the AW-501 form (Appendix G).

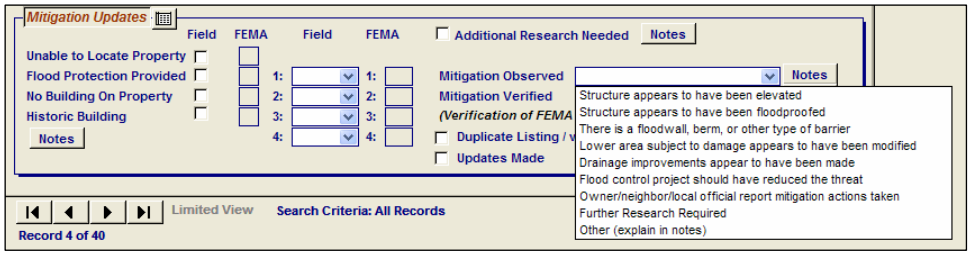


The *View/Documents* function on the NT bar may be used to load any supporting documentation available, such as elevation certificates or demolition permits, for claimed mitigation measures.

If a record needs to be tagged for additional research, the *Additional Research Needed* box should be checked. Notes pertaining to the items for further investigation can also be included.

Under the *Mitigation Observed* drop down menu, the user has the opportunity to populate the NT with apparent mitigation measures observed on-site that are not yet part of the NFIP record and that cannot be easily documented while only visiting the site. The measures included under the drop down box are as follows:

- Structure appears to have been elevated
- Structure appears to have been floodproofed
- There is a floodwall, berm, or other type of barrier
- Lower area subject to damage appears to have been modified
- Drainage improvements appear to have been made
- Flood control project should have reduced the threat
- Owner/neighbor/local official report mitigation actions taken
- Further Research Required
- Other (explain in notes)



The Mitigation Verified drop down box may be used to record whether or not the mitigation listed from the BureauNet download has been observed and verified in the field.

Under *Duplicate Listing with RL #*, the user should check the box if it is a duplicate listing and note the Repetitive Loss/Property Locator number of the other repetitive loss listing(s).

If changes or updates are recorded in the mitigation section (including checked mitigation type boxes, and mitigation codes or funding sources) or the property is a duplicate listing, the *Updates Made* box must be checked to indicate the potential need for updates within the BureauNet system.

6.2.2 Site Observations Tab

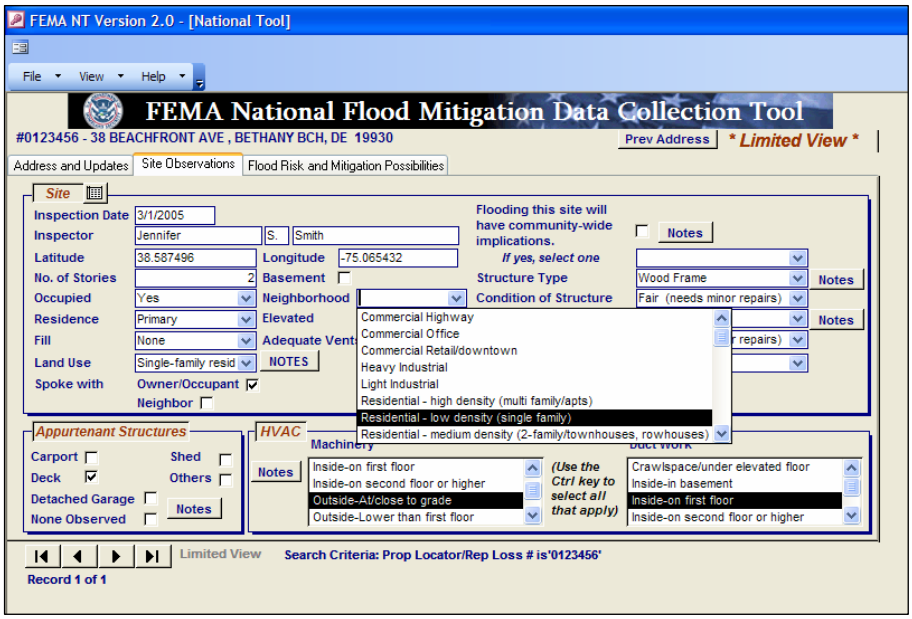
This screen contains several sections that should be completed during the field inspection. Note that a datasheet view is available for this section.

6.2.2.1 Site

The following data should be entered in this section based on a site visit:

- *Inspection Date*
- *Inspector (name)*

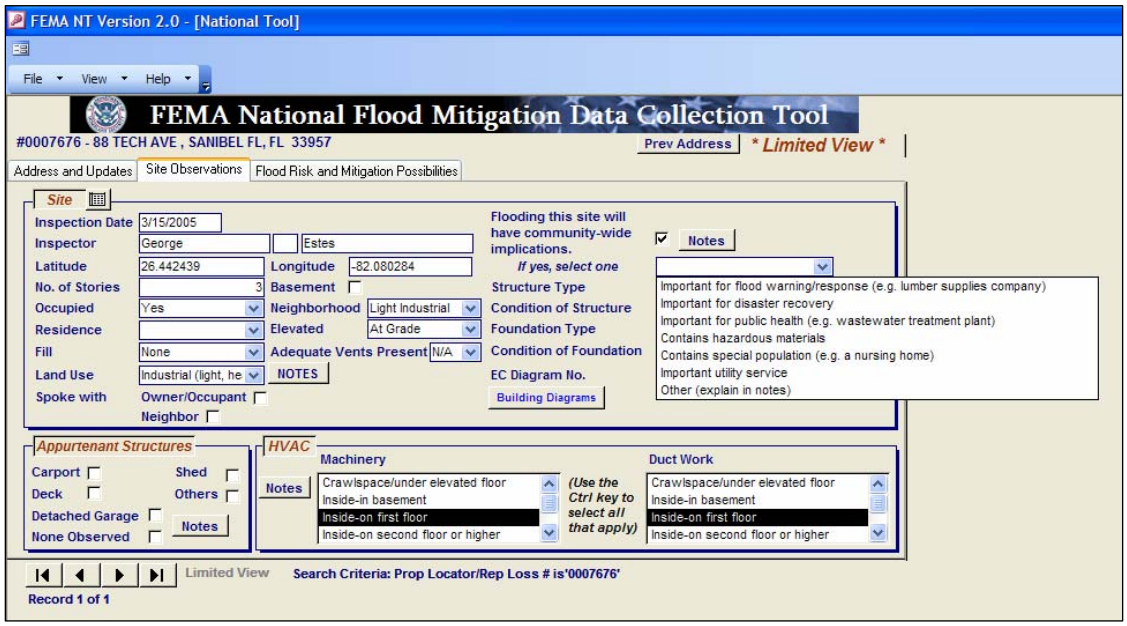
- *Latitude* and *Longitude* coordinates - These should be obtained in the field using GPS equipment such as a handheld GPS unit. Accuracy within 20 meters (approximately 65 feet) is required for FEMA grant applications. The accuracy of the GPS unit should be checked, and the reading taken at the corner of the structure with the lowest adjacent grade whenever possible. If the grade is uniform, the reading should be taken at the corner of the structure closest to the flood source.
- *Number of Stories* – This may be determined from a field visit or from building records. A story is defined as a complete above grade section of a building having one continuous or approximately continuous floor. Generally, this does not include basements (sub-grade or partially sub-grade) or attics.
- *Basement* – check box if there is a basement as defined by the NFIP. A basement is defined as any area of a building with a floor that is below ground level on all sides.
- *Occupied* – The structure's occupancy status should be indicated using the following selections: yes, no, or seasonal.
- *Residence* – If it is known, the user should indicate whether residential buildings are primary or secondary residences.
- *Fill* – If there is fill, the height should be indicated. A drop down menu provides choices from below street grade to >4 feet.
- *Land Use* – The structure's appropriate land use should be indicated from the following list of uses: single-family residential, 2 to 4 family residential, multi-family residential (5 or more units), commercial (highway, office, retail, downtown), industrial (light or heavy), institutional (hospitals, churches), educational (schools, colleges), non-profit, public, semi-public, transportation, open space, and other.
- *Spoke with* – The boxes indicating whether the NT user spoke with the owner/occupant or neighbor should be checked if they apply. Upon checking one of these boxes, the Owner, Occupant, and Neighbor Information window will open where further details should be added including pertinent details about the communication.
- *Neighborhood* – Information on the neighborhood surrounding the property should be provided by highlighting the appropriate selection from the following categories: commercial highway; commercial office; commercial retail/downtown; heavy industrial; light industrial; residential – high density (multi-family/apartments); residential – low density (single-family); residential – medium density (2-family, townhouses, rowhouses); and rural residential.



- *Elevated* – The structure's lowest floor elevation above grade, if applicable, should be indicated. A drop down menu provides selections ranging from Not Applicable to >12 feet.
- *Adequate Vents Present* – The *Yes, No, Not applicable, or Undetermined* button that best indicates *if* vents are present that meet the community's floodplain management requirements should be selected. For post-FIRM structures with enclosures below the BFE, this means at least two openings having a net area at least 1 square inch for every square foot of enclosed space are situated on different walls of the enclosure, so that their bottom edges are no higher than 1 foot above grade. Additional minimum NFIP requirements for vents can be found in the Code of Federal Regulations [44 CFR §60.3 (c) (5)]. If the structure is pre-FIRM, not in a SFHA, or without enclosures below the BFE, select *Not Applicable.*

- *Flooding this site will have community-wide implications* – A check in the box for this category indicates that the building has either an essential public function, contains a special population, or has hazardous material storage on-site. If this box is checked, then one of the following options should be selected from the drop down menu:
    - Important for flood warning/response
    - Important for disaster recovery (e.g., lumber supplies company)
    - Important for public health (e.g., wastewater treatment plant)
    - Contains hazardous materials
    - Contains special population (e.g., nursing home)

- Important utility service
- Other (explain in notes)



- *Structure Type* – This is indicative of the major type of materials used to construct the structure and the degree of engineering involved in its design. General categories should be selected if further details are unknown (i.e., wood frame vs. engineered wood frame, or steel vs. heavy steel). Consultation with the local building official is highly recommended. The NT provides a selection of common structure types and includes a choice for *Other* and a notes section should the NT user encounter a construction type not listed.

- *Condition of Structure* – These data are based on the level of repair required. Consultation with the local building official is highly recommended.
  - Good (Optional Minor Repair) – Select this option when only cosmetic type repairs are needed
  - Fair (Needs Minor Repair) – Select this option when the following characteristics are observed:
    - Minor shrinkage cracks due to thermal expansion and contraction
    - Signs of rust on iron or steel members
    - Signs of corrosion of rebar
  - Poor (Needs Significant Repair) – Select this option when the following types of damage are observed:
    - Bowed brick veneer wall or parapet walls
    - Leaning of wall

- Cracking of wall due to excessive settlement
- Building settlement
- Large cracking around sills, eaves, chimneys, parapets, and iron or steel lintels
- Differential settlement of chimney
- Fungal and insect attack of wood
- Exposed rebar in concrete walls due to corrosion
- Fire damage

- *Foundation Type* – The selection of a foundation type may require a close inspection of the structure. Consultation with the local building official is highly recommended. The NT provides a selection of common foundation types and includes a choice for *Other* and a notes section should the NT user encounter a foundation type not listed.

- *Condition of Foundation* – This is based on the level of repairs needed. Consultation with the local building official is highly recommended.
  - Good (Optional Minor Repair) – Select this option when only cosmetic type repairs are needed
  - Fair (Needs Minor Repair) – Select this option when one or more of the following is observed:
    - Minor shrinkage cracks in foundation pier
    - Soil shrinkage due to nearby trees or plants
    - Cracks associated with thermal expansion and contraction
  - Poor (Needs Significant Repair) – A foundation is considered to be in poor condition if one or more of the following conditions exist:
    - Movement of foundation
    - Soil erosion around foundation
    - Settlement or rotation of pier footing
    - Cracking in foundation wall due to movement
    - Deterioration of pier like vertical cracking or bulging.
    - Fire damage

- *EC Diagram No.* – This refers to the type of structure and foundation as it corresponds to one of eight diagrams included as part of the FEMA Elevation Certificate (EC) (FEMA Form 81-31) on pages 6 through 7 of the EC Instructions. The diagrams from the FEMA EC are attached to the NT for reference. Simply select the button labeled Building Diagrams below this

selection to see representations of each type of building and then select one of the eight options, or choose Unable to Determine.

6.2.2.2 Appurtenant Structures

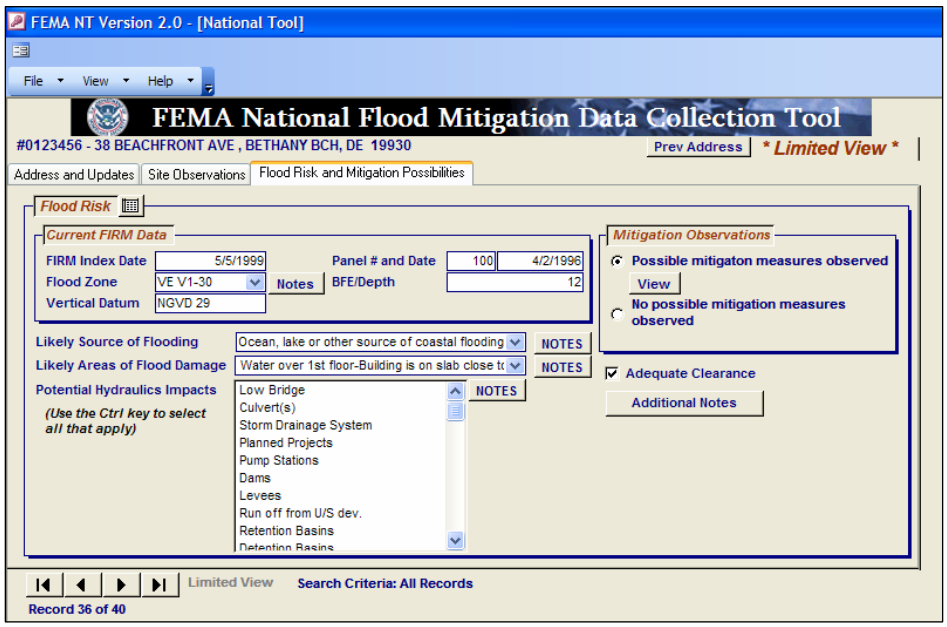
Appropriate boxes should be checked for appurtenant/accessory structures located on site such as a detached garage, carport, deck, shed, etc. Any additional comments may be provided in the *Notes* section.

6.2.2.3 HVAC

Information about the location of the Heating, Ventilation, and Air Conditioning (HVAC) is collected in this section. All locations of HVAC machinery and ductwork should be identified (crawlspace, inside, or outside) and highlighted. Others that are not included in the list may be explained in the corresponding *Notes* section.

6.2.3 Flood Risk and Mitigation Possibilities Tab

This section includes information such as current FIRM data, flooding sources, likely areas of flood damage, potential hydraulic impacts, and mitigation observations. The information for this tab is found through study of the FIRMs, and through an assessment of the site performed in the field.



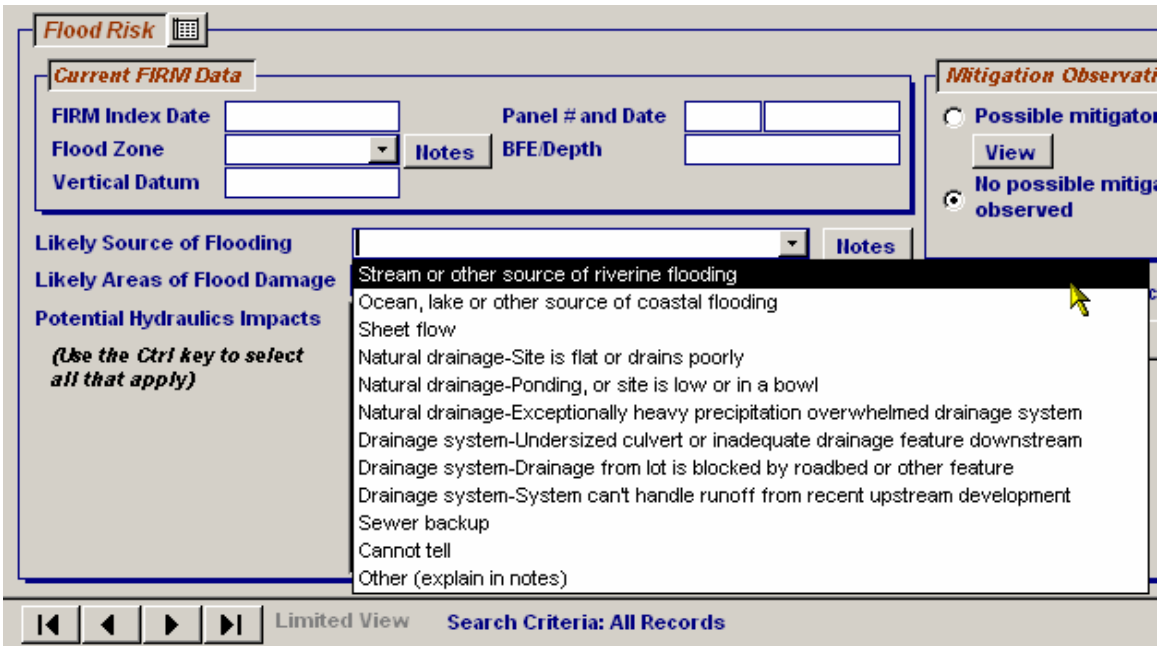
6.2.3.1 Flood Risk/Current FIRM Data

A datasheet view is available for this section, which contains information that is obtained from the FIRM, such as the FIRM Index Date, Flood Zone (AE A1-30, A, AR, AO, V, VE, B/XShaded, C/XUnshaded) Vertical Datum, FIRM Panel # and Date, and BFE or Flood Depth (AO and AH zones). The *NFIP Community Status Book* (available online at http://www.FEMA.gov/fema/csb.shtm) can be used to

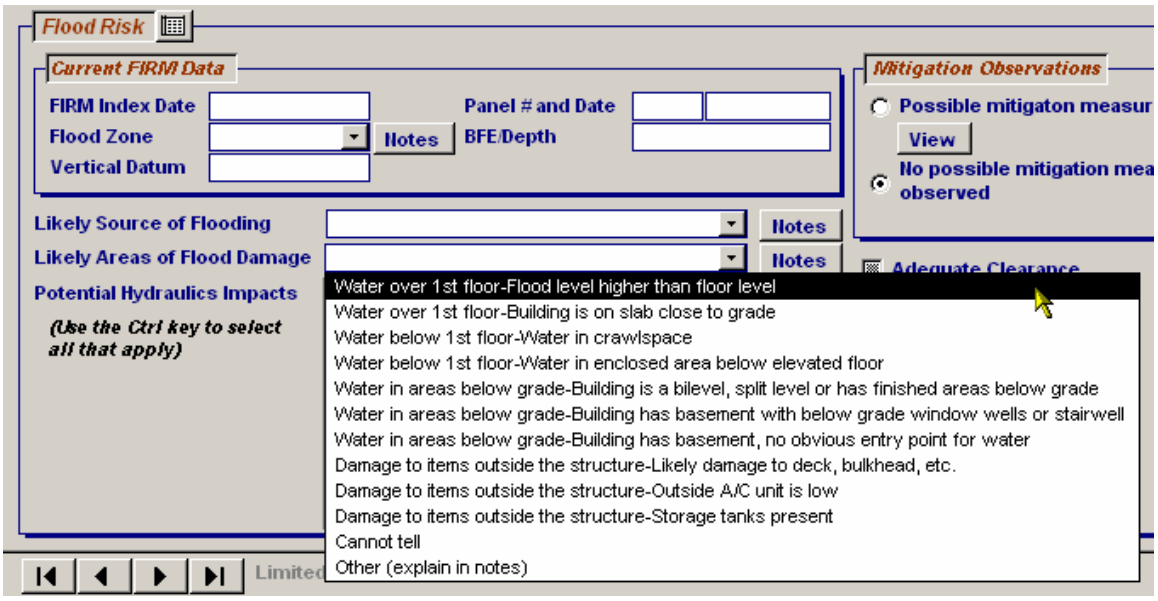
identify the date of the current FIRM Index to be used when locating the structure on its appropriate FIRM panel. It is the date listed under the Current Effective Map column.

A vertical datum type should be entered for the BFE. It will generally be NGVD 29 (National Geodetic Vertical Datum of 1929) or NAVD 88 (North American Vertical Datum of 1988). In some instances, a locally applicable vertical datum may be used. If the BFE and building elevation are provided in different vertical datum, it will be necessary to obtain the conversion information (probably from a local source) and enter the conversion formula in the notes section. Information on the FIRM Index Date, Flood Zone, BFE or Depth, Vertical Datum, Panel number, and Panel Date is obtained from the FIRM.

Likely Source of Flooding should be determined during the field visit with assistance from the FIRM or other map as necessary. The appropriate source from the dropdown (riverine flooding, coastal flooding, sheet flow, natural drainage, drainage system, sewer backup, etc.) should be selected.



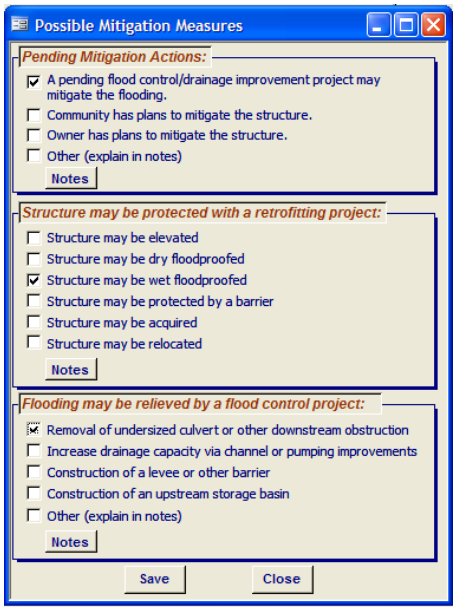
Likely Areas of Flood Damage – An option from the dropdown should be selected to identify the likely areas of flood damage (water over or below first floor, water in areas below grade, damage to items outside the structure, etc.). This information may be obtained from a site visit and/or talking with the homeowner or neighbor.



Potential Hydraulics Impacts – This section provides a list of potential structures and infrastructure that might affect the frequency and/or severity of flooding in the area. Multiple items may be selected by pressing the control key. A wide range of projects includes bridges, levees, storm drain systems, pump stations, dams, retention basins, detention basins, etc. For the planned projects and other selections, a notes box is provided for impacts that are not listed to be described.

6.2.3.2 Mitigation Observations

This section allows users to input information regarding pending mitigation projects. It also provides the NT user an opportunity to analyze the results of the data collected and provide any comments on possible appropriate mitigation actions. The NT user is expected to use his/her knowledge and experience to assess the situation and suggest feasible measures that might be cost-effective. The *View* button enables the user to access the list of Possible Mitigation Measures. Notes tabs under each of the three subsections of Possible Mitigation Measures are included for the input of additional information.



Adequate Clearance – This box should be checked if the structure is clear by at least 20 feet on each side to allow for equipment and construction on site. This clearance may be necessary during construction of mitigation projects such as structure elevation.

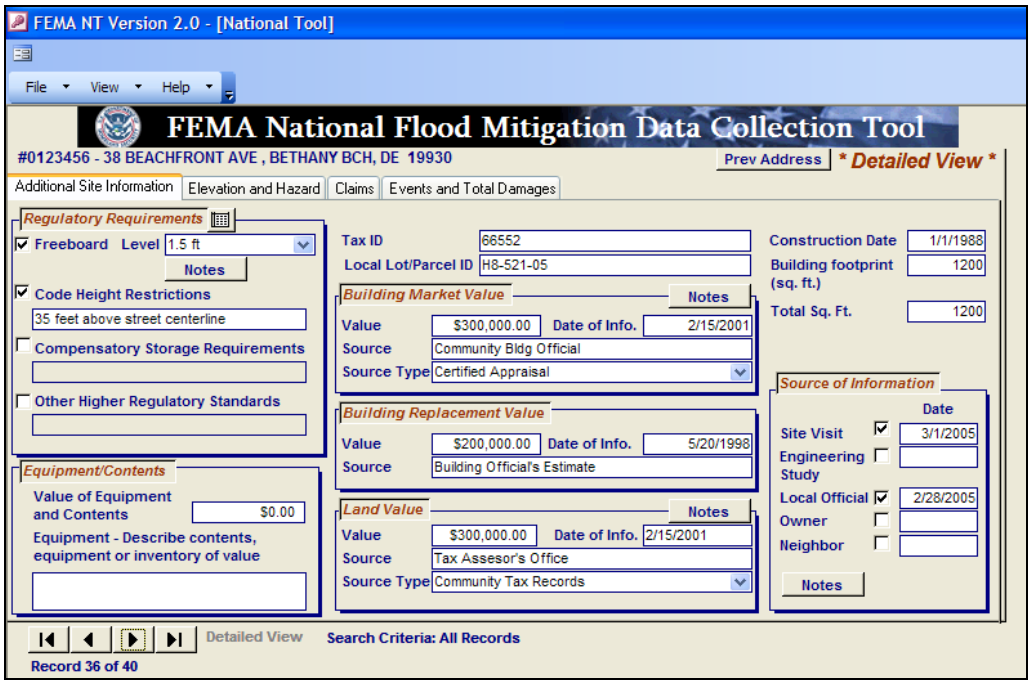
6.3 Detailed Data View

The Detailed Data View is applicable and suitable when a more thorough inspection of the property and its surroundings is conducted, and when contact with local or state officials is made to gather structure-specific information and coordinate on-site data collection efforts. There are four pages/tabs within the Detailed Data View: Additional Site Information, Elevation and Hazard, Claims, and Events and Total Damages.

6.3.1 Additional Site Information Tab

Tax Identification Numbers and Local Lot/Parcel Identification Numbers may be added in the top center of the screen. This information is useful in identifying a property when the address is unclear or inadequate. Note that a datasheet view icon is also available for this page if the user wishes to view or edit these data for multiple records.

The Top right of this screen provides an area for the entry of *Date of Construction* – This information might be found in building permit records. Normally, the date the permit was applied for will be used. If the year is known, but not the exact date, it can be entered using 01/01 for the month and day. Fields for the building footprint square footage and the total structure square footage are also provided. While this information can be gauged during a site visit, the best source for accurate measurements is the local building or zoning department.

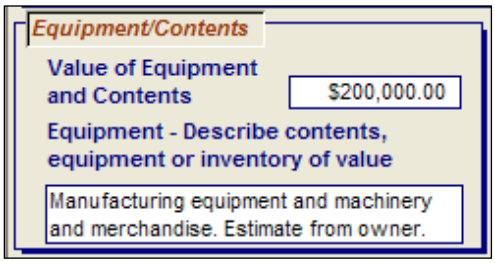


6.3.1.1 Regulatory Requirements

A datasheet view is available in this section that includes important criteria that could affect potential mitigation measures. Information on these regulatory requirements should be collected from local officials. They include the following:

- *Freeboard* – If the community requires structures in floodprone areas to be elevated a specific height above the BFE, the *Freeboard* button should be checked. The required height above the BFE should be selected in the *Level* box.
- *Code Height Restrictions* – This indicates the maximum elevation/height to which a structure can be constructed or elevated, and is usually implemented in waterfront communities to protect views.
- *Compensatory Storage Requirements* – Some communities have regulations requiring a hydraulically equivalent storage volume to be created for floodwaters when development results in the displacement of floodwater storage capacity from part of the floodplain. If this is applicable, it should be recorded.
- *Other Higher Regulatory Standards* – Any other state or local regulations that could affect mitigation measures such as enclosure limitations or special requirements for the protection of critical facilities should be recorded in this section.

6.3.1.2 Equipment/Contents



Only the total value of noteworthy or unusual equipment and contents should be entered in this section. This will generally apply only to non-residential uses. A description of unusual or expensive items (e.g., machinery, merchandise) should be provided, along with any other information that is relevant. The values of contents or machinery common to the current or anticipated occupancy do not need to be entered.

6.3.1.3 Building Market Value

This is the value of a structure based on the estimated price for which a willing buyer in the current real estate market would pay to a willing seller. This information may be available from a tax assessor's office or from local building officials. While tax assessment records do not always give an actual building market value, they may note a multiplier to be used with the assessment value in order to arrive at a market value. If a tax assessment is available without some type of conversion multiplier, but seems undervalued for a market value, this should be noted by clicking on the *Notes* button. The following data should be entered in this section:

- Dollar value
- Date the value was estimated
- Source (e.g., local building official, tax assessor's office)
- Source type (e.g., community tax records, certified appraisal)

6.3.1.4 Building Replacement Value

Building Replacement Value – This refers to the value of a structure based on the cost of materials and labor to rebuild it. Building replacement values may be available from local officials and are required for Benefit-Cost Analyses. If necessary, it may be determined by a building official, engineer, or architect using cost estimating tools such as the Marshall and Swift Handbook, R.S. Means Cost Data, or other comparable resources. Information to be completed for this section includes the following:

- Dollar value
- Date the value was calculated
- Source of the value, including who created the estimate and the method of calculation used to develop the estimate.

6.3.1.5 Land Value

As with the Building Market value, the Land Value of the property may be available from tax assessment records, and should be recorded separate from the building value. If this assessment seems undervalued (or overvalued), the user should enter a message using the *Notes* button, indicating a possible discrepancy. Information to be completed for this section includes the following:

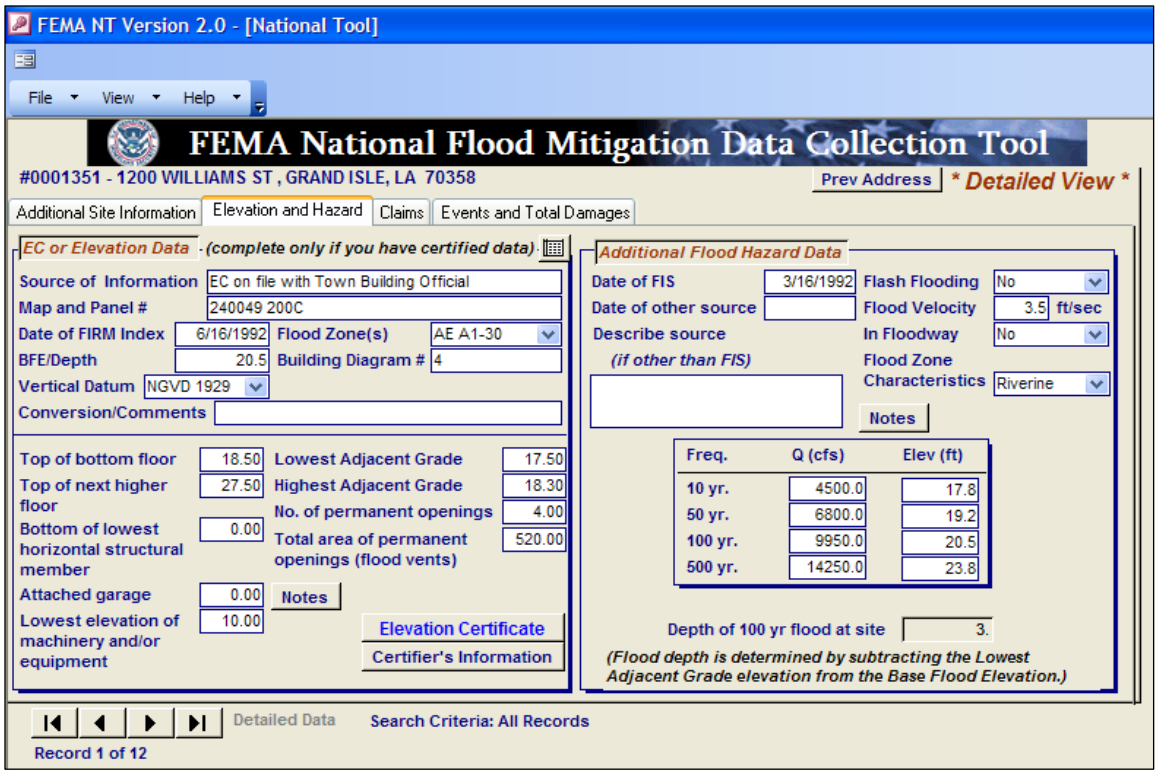
- Dollar value
- Date the value was estimated
- Source of the value
- Source type of the value such as tax assessment or appraisal

6.3.1.6 Source of Information

This feature enables the user to report the various source(s) of information recorded under the detailed view. A date should be included for each source that is checked. The *Notes* section may be used to provide names, phone numbers or addresses of contacts.

6.3.2 Elevation and Hazard Tab

This screen contains data related to the flood hazard and various elevation reference points of the structure that may be on file with the community. The left half of the screen requires information about the BFE and elevation of the structure. The right half of the screen requires additional flood hazard information from the FIS or other comparable source. Note that a datasheet view icon is also available for this page if the user wishes to view or edit these data for multiple records.



6.3.2.1 EC or Elevation Data

This section should capture information directly from a FEMA Elevation Certificate (EC), if available. The FIRM information gathered here may be different than the current FIRM data gathered in Section 6.2.3.1 if community FIRM panels were revised after the structure was permitted for construction. If an EC is not available, certain fields may be completed using as-built records or similar certified data. Any discrepancies noted in the BFE, FIRM Zone, FIRM Index date, Panel number, etc. (as compared to data collected for the *Limited View/Flood Risk and Mitigation Possibilities*) should be noted in the notes area provided for this section. Following is a description of each requested data field.

- *Source of Information* – If an EC is not provided, the source of information might be a building permit application or an as-built certification. An engineer working for the property owner or developer, or the local building

code official or zoning officer may have determined and gathered certified elevation information. Generally, the flood elevation data will have been taken from the community FIS or FIRM where the BFE for a given site is mapped. However, when the area is mapped as an Approximate A or V zone, a local study or historical high water marks might be used to establish the BFE. Additionally, if a regional or local study completed more recently than the effective FIS indicates an increase in the BFE, this study might be used as a source for flood hazard data.

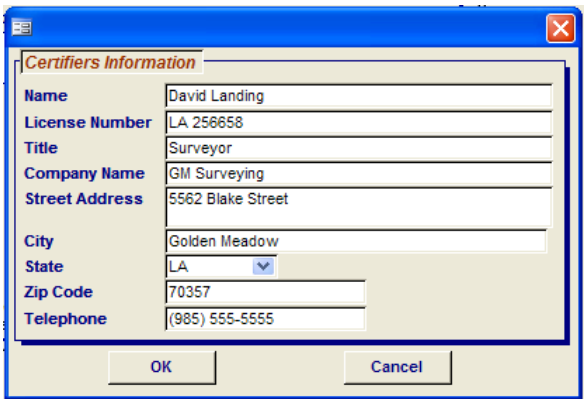
- *Map and Panel Number* – The FIRM map and panel number should be entered here if it was recorded on the certified data.
- *Date of FIRM Index* – This should be taken from the EC or other certified data where available.
- *Flood Zone* – The flood zone from the EC or other certified data (corresponding to FIRM zones AE, VE, B/X shaded, C/X unshaded, AO, AR, etc.) should be noted here.
- *BFE/Depth* – The BFE or flood depth (AO, AH zones) from the certified data should be entered here.
- *Building Diagram Number* – This is the EC Building Diagram Number reported on the elevation certificate. The linked FEMA Elevation Certificate can be viewed for reference by clicking on the *Elevation Certificate* button.
- *Vertical Datum* – Enter the vertical datum type for the BFE from the EC or other certified data (see Section 6.2.3.1 for a description of vertical datum types and possible conversion notations).
- *Conversion Comments* – If the BFE datum is different from the structure elevation information datum, a method for conversion should be entered here.

The next set of entries corresponds to those found in Section C of the FEMA EC. Structure elevation data and data about flood vents are entered here. The FEMA EC may be referred to for any questions. Again, this information should only be included if there is a certified source, such as an EC, on file with the community:

- *Top of bottom floor* – This includes basements and other possible enclosures.
- *Top of next higher floor*
- *Bottom of lowest horizontal structural member* – This measurement is generally only taken in V zones, but may also be relevant in communities with Coastal A zone regulations.
- *Attached garage*
- *Lowest elevation of machinery and/or equipment*
- *Lowest Adjacent Grade*

- *Highest Adjacent Grade*
- *Number of permanent openings* – This includes the openings that serve as flood vents to allow the automatic entry and exit of floodwaters from areas below the BFE.
- *Total area of permanent openings (flood vents)* – The surface area of flood vent openings in square inches.

Certifiers Information – The certifier's contact information, license number, company name and street address should be recorded in this section.



6.3.2.2 Additional Flood Hazard Data

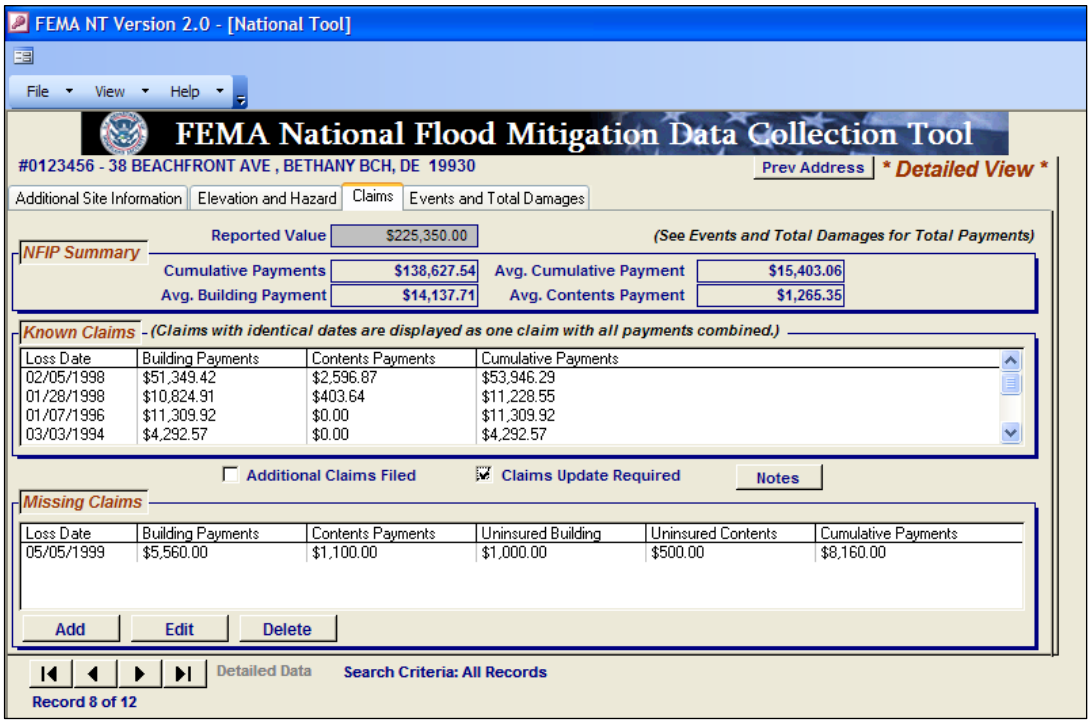
Information from the FIS or a comparable source (where the FIS is not available or better information is available) is collected here to characterize the flood risk and to collect flood hazard risk information that is necessary to run a Benefit-Cost Analysis.

- *Date of FIS*
- *Date of Other Source*
- *Describe Source (if other than FIS)* – The name of the study or other source used should be provided here (e.g., USACE flood information reports, FHA floodplain studies, etc.). Adequate documentation of this source is necessary, including an electronic copy if available, or scanned images of pertinent parts of studies. These can be attached to the NT using the documents button to attach them (see Section 6.1.2 for how to load documents to the NT).
- *Flash Flooding* – Information on whether or not the structure is subject to flash flooding may be obtained from the FIS or community officials' knowledge of the area.
- *Flood Velocity* – Mean flood velocity within the floodway can be obtained from the FIS. For flood velocities at sites outside of the floodway, historical flood data might provide more accurate velocity estimations.
- *In Floodway* – If a floodway analysis was performed as part of the FIS, the floodway delineation on the FIRM or Floodway Map will indicate whether the site is located within or outside of the floodway.

- *Flood Zone Characteristics* – In this section, the type and characteristics of the flood zone should be included (riverine, coastal, sheet flow, shallow floods, ponding, ice jams, sewer backflows, etc.).
- *Flood Frequency Based Discharges (Q) and Elevations* Table – Discharge information is available for certain points along a detailed studied stream and is found in the *Summary of Discharges* table in the Hydrologic Analyses section of the FIS. The elevations are usually available for detailed studied flood areas from the flood profiles and are necessary to run the Benefit-Cost Full Data Software.
- *Depth of 100 year flood at site* – This depth will be calculated automatically if information on the BFE and Lowest Adjacent Grade is entered in the EC or Elevation Data section of this screen.

6.3.3 Claims Tab

Claims information from the BureauNet download is recorded in this section.



Reported Value – This is the reported value of the building associated with the most recent loss as recorded in BureauNet. It is determined by taking the replacement cost value (RCV) when available or, alternately, the actual cash value (ACV). RCVs were not reported prior to May 1, 1997. If the reported value from the most recent date of loss is not acceptable, the value from the previous date of loss is examined and used if deemed acceptable. Acceptable is defined as any value that is greater than zero, but less than $10 million for 1 to 4 family properties and greater than zero but less than $100 million for other properties. If

multiple occurrences of flooding are found for any date of loss, the "ASSUMED CONDO" label is used in the property value field. If no value meeting the definition of acceptable is found, the "VALUE NOT AVAILABLE" label is inserted in the property value field.

6.3.3.1 NFIP Summary

Cumulative Payment – This refers to the total of all payments from claims as noted in the last column of the *Known Claims* table.

Average Cumulative Payment – This refers to the average payment per claim, including both contents and building. The entry is calculated from claims in the Building Payments and Contents Payments columns of the *Known Claims* table.

Average Building Payment – This refers to the average payment per claim for building payments only. It does not include the contents value.

Average Contents Payment – This refers to the average payment per claim for contents payments only. It does not include the building value.

6.3.3.2 Known Claims

The *Known Claims* table is imported from BureauNet and contains information for each claim made on the structure, up to a maximum of nine claims. It includes information on the loss date, building payments, and contents payments.

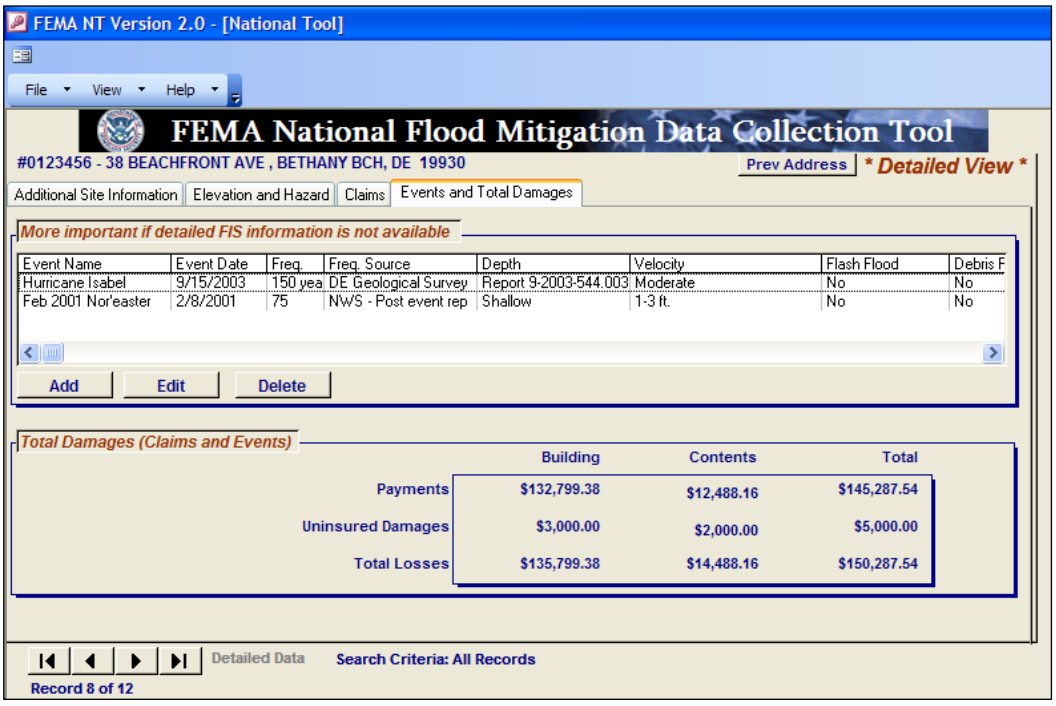
Additional Claims Filed – This box should be checked when there is an indication from the owner or other source (such as a local official) that a claim was made on the structure that was erroneously excluded from the NFIP data.

Claims Update Required – This box should be checked when there are data to support a missing claim and the user can provide adequate data for the claim to be further investigated and/or added to the NFIP data.

6.3.3.3 Missing Claims

The information in the *Missing Claims* table is similar to that in the *Known Claims* section, except that it allows the user to enter missing records. When information is provided or obtained that indicates that a claim was made, but not properly recorded with the corresponding structure (it may have been recorded with another structure) in the NFIP records, the claim information may be recorded in this table. This information may be obtained from copies of checks, adjusters' statements, proof of loss records gathered from property owners or local officials, or documented claims or records within the NFIP BureauNet data. Additionally, uninsured losses for building and contents corresponding to known claims (such as deductibles or damages exceeding the limits of the policy) may be added by the NT user to this section. The source of the data should be noted in the Notes field on the screen and any documentation (digital files) should be added via the documents attachment function (see Section 6.1.2). Records in the Missing

Claims Section can be added, edited, or deleted using the keys on the bottom left of the screen.



6.3.4 Events and Total Damages Tab

This tab allows the user to add information about reported damages to the structure where there are no insurance claim records, and also summarizes all of the losses for the structure including known claims, missing claims and other events.

6.3.4.1 Events Table

The *Events* table enables the user to enter information about specific flood events, including their recurrence interval and flood depth. These events may or may not correspond to claims made that were recorded on the previous screen. If there are losses associated with the event that were not insured, the loss information should also be included in this table and explained. Records can be added, edited, or deleted using the keys on the bottom left of the table. In order to add an event, the following information should be provided:

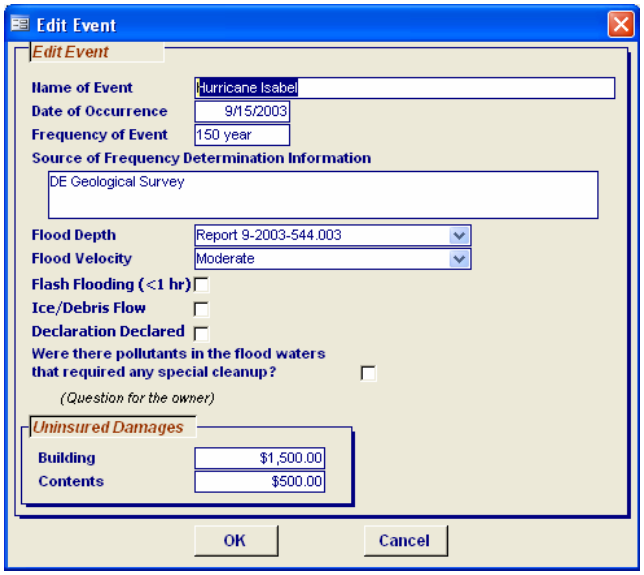
- *Name of the Event (i.e., Hurricane Floyd or February 1991 snowmelt and rainfall event)*
- *Date of Occurrence*
- *Frequency of the Event (i.e., 25-year flood or 100-year flood)*
  Note: FEMA's Mitigation Benefit-Cost Analysis (BCA) Toolkit CD provides guidance on acceptable methodologies for determining flood recurrence intervals.

- *Source of Frequency Determination Information* - Clear documentation of the sources used for determining the recurrence interval/frequency of the event as well as any losses should be provided. The following are considered acceptable sources for flood event frequency determination: FEMA Flood Insurance Studies, US Geological Survey (USGS) Post-Event Reports, USACE Post-Event Report, and National Weather Service (NWS) or National Oceanic and Atmospheric Administration (NOAA) recurrence interval estimates. Estimates vary from location to location, so accurate documentation is necessary.
- *Flood Depth*
    - very shallow (<1 ft)
    - shallow (1 to 3 ft)
    - moderate (3 to 6 ft)
    - deep (>6 ft)
- *Flood Velocity*
    - fast (>5 ft/s)
    - slow/moderate (<5 ft/s)

The appropriate boxes should be checked if the following has occurred:

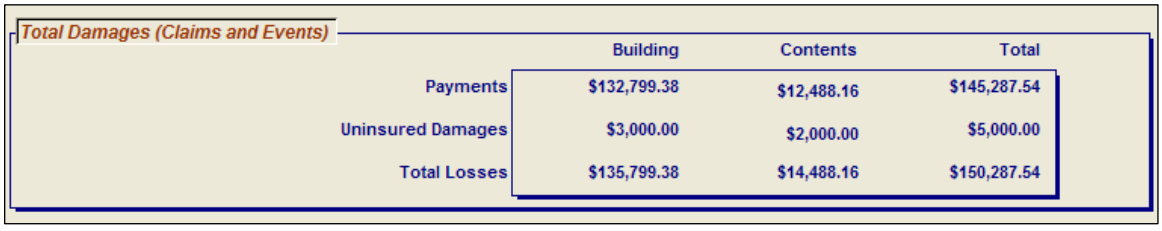
- *Flash Flooding*
- *Ice/Debris Flow*
- *Declaration Declared*
- *Were there pollutants in the flood waters that required any special cleanup?*

Finally, the monetary amount of any flood damages reported by the owner that were caused by flooding events where a NFIP policy was either not in effect or where the damages incurred did not exceed the deductible or $1,000 paid under the NFIP should be reported here.



6.3.4.2 Total Damages

The *Total Damages* table contains information on all damages entered on the *Claims* and *Events and Total Damages* screens and presents it in the form of a concise summary. The table contains information on Total Payments (both building and contents), Total Uninsured Damages, and Total Losses. Any edits made to the *Missing Claims* table or *Events and Total Losses* table will be reflected in the *Total Damages*.



	Building	Contents	Total
Payments	$132,799.38	$12,488.16	$145,287.54
Uninsured Damages	$3,000.00	$2,000.00	$5,000.00
Total Losses	$135,799.38	$14,488.16	$150,287.54

Appendix A – System Requirements and Installation Instructions

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System Requirements

- Microsoft Excel 5.0 or higher (for converting BureauNet Import files)
- Microsoft Access 2000, 2002 (XP) or 2003
- Adobe Acrobat Reader 6.0 or earlier
- There are Microsoft library routines needed for this tool that are included on the installation CD. The installation CD must be installed on each laptop/PC on which the NT will be used. It is installed using the Setup.exe file. After the installation, the database (or .MDB file) and the folder named NFMDCT, which contains associated files, can be updated/replaced as necessary, but must always be stored together in the same location.
- While there are not strict guidelines for PC processing speeds or RAM when using the NT, a Pentium III processor with at least 128MB of RAM or better will help to facilitate the following: 1) successful import of BureauNet data when there are hundreds or thousands of records; 2) successful appending of records when there are hundreds or thousands of records; 3) faster record loading times when browsing through records; 4) faster display of thumbnails when browsing through records; and 5) faster download of pictures in the image gallery.

FEMA National Flood Mitigation Data Collection Tool (NT) Version 2.0

Installation Instructions

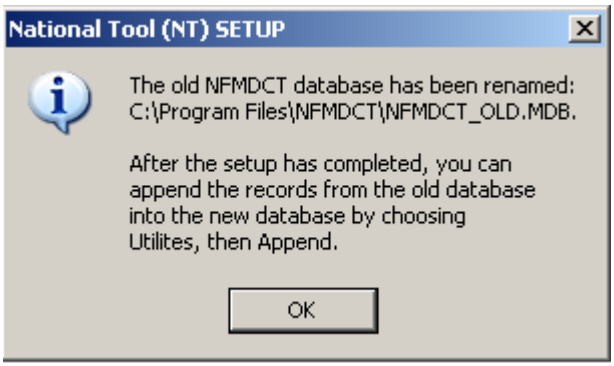
NOTE: You must have permissions to the C:\Windows\System32 folder in order to load this application (administrative rights).

CAUTION: Before installing any version of the NT application, make a copy of the existing NFMDCT folder found in C:\Program Files and save it to an external location like a CD-ROM or memory stick or to another location on the C:\ drive other than C:\Program Files\NFMDCT. For Access 2003 installation, if you select Remove when prompted, failure to back up your existing files previously will result in the loss of all your existing property records, images and documents during installation.

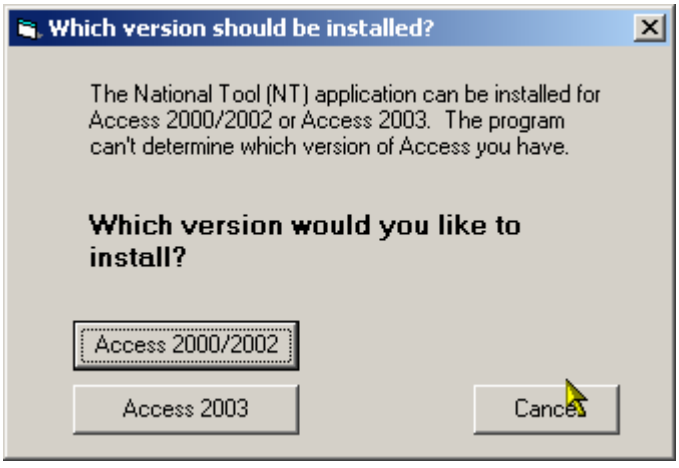
1. Insert the CD-ROM into the PC. If the installation program doesn't automatically start, browse to the CD-ROM and click Setup.exe.

2. The program will prompt whether you want to continue with the installation or not. If you continue with the installation and the NT application currently exists on the PC, the database will automatically be renamed (see Step 3).

3. The following message will display **only** if the NT application currently exists on the PC. The database on the PC will be renamed NFMDCT_OLD.MDB so the new database, NFMDCT.MDB, can be loaded. After the installation is done, the properties from the NFMDCT_OLD.MDB database can be appended into the new database, NFMDCT.MDB. To append properties, start the NT application; select Utilities from the main menu, then Append Properties.



4. The installation program will attempt to determine which version of Microsoft Access™ is on the PC. If it can't, it will display the dialog box seen below. Click the appropriate button for the version to be installed. If you're unsure of the Microsoft Access™ version you have, open Microsoft Access™, click on Help, then About Microsoft Access.



5. When the Installation program begins, click OK on the first screen.

For Access 2000/2002 installation

a. Click the computer icon on the next screen to start the installation.

You may receive the following message for some of the files that are loaded: ***"A file being copied is not newer than the one that is currently on your system. It is recommended that you keep your existing file. Do you want to keep this file?"*** *If the file has a .DLL or .OCX extension, you should keep the file. If it doesn't, you should NOT keep the file.*

For Access 2003 installation

CAUTION: Before installing any version of the NT application, make a copy of the existing NFMDCT folder found in C:\Program Files and save it to an external location like a CD-ROM or memory stick or to another location on the C:\ drive other than C:\Program Files\NFMDCT. For Access 2003 installation, if you select Remove when prompted, failure to back up your existing files previously will result in the loss of all your existing property records, images and documents during installation.

1. If the NT application already exists on the PC, the installation program may prompt to **Repair** or **Remove** it. If the version on the PC is the same as the version on the Installation CD, choose Repair; if it isn't or you aren't sure, choose Remove.

CAUTION: When the remove process has finished, run Setup.exe again from the Installation CD to install the application, and continue from the beginning of these instructions.

2. Click Typical Installation.

You may receive the following message for some of the files that are loaded: ***"A file being copied is not newer than the one that is currently on your system. It is recommended that you keep your existing file. Do you want to keep this file?"*** *If the file has a .DLL or .OCX extension, you should keep the file. If it doesn't, you should NOT keep the file.*

6. The application will be loaded onto the hard drive in *C:\Program Files\NFMDCT*.

If you cancel the installation, and a version of the NT application previously existed on your PC, you will have to rename the old database. Browse to the C:\Program Files\NFMDCT folder and rename the most recent NFMDCT_OLD.MDB file to NFMDCT.MDB.

Enhancements made to this version

1. Several new reports were added to the system. You can run the reports from the main menu by clicking on the Reports button or you can choose View / Reports from the menu bar in Limited or Detailed views.

2. New utilities were added that allow you to
   a. Import Latitude/Longitude numbers and pictures
   b. Select certain criteria when appending data

3. The Find options have been expanded and some bugs were fixed

4. The menu bar on the Limited and Detailed views were restructured

5. Several new fields were added

6. The View/Images screen was rewritten to allow you to view up to six thumbnail images per page. You can right click an image to delete it or set it as the main image.

7. In Limited view you can choose whether to view the thumbnail image or not

8. Additional key functionality was added to Limited and Detailed views
   a. Page down key = go to the next record
   b. Page up key = go to the previous record
   c. Home key = go to the first record
   d. End key = go to the last record

9. The Neighborhood and Land Use options in Limited View were modified.

10. The Import BureauNet feature has been improved. You no longer have to modify the spreadsheet to remove "VAL NOT AVAIL" and "ASSUMED CONDO" values. The spreadsheet still has to be saved in Excel version 5.0 or greater.

11. A new program has been added to assist in compacting the database. To compact the database, go to C:\Program Files\NFMDCT and double click on Compact_MDB.EXE. Browse to the database and select the continue button. A backup is always saved in the backup folder before the file is compacted. Do not interrupt the compact process once started. Interrupting the process may corrupt the database. If corrupted, restore the file with the backup file stored in the backup folder.

12. The address has been included at the top of the Limited and Detailed views

13. A new menu bar was added to each report. You can now print a range of pages and export the report to different formats.

14. Several bugs were fixed

Appendix B – Troubleshooting

This page is intentionally left blank.

Main Menu Function

Problem – The installation seems to have been successful, but when I click one of the functions from the main menu, nothing happens.

Solution – While the NT uses common Microsoft Library routines, sometimes the reference files are not properly installed or registered on the user's machine. Below is a list of all of the reference files used by the NT that might need to be installed or registered, and instructions on how to register them.

Files

C:\Windows\System32\
(Note: the Windows folder may be named WINNT)
ComDLG32.OCX
MsComm32.OCX
OlePrn.DLL
PlugIn.OCX
ScrRun.DLL
StdOle2.TLB

C:\Program Files\NFMDCT\
MSADOX.DLL

C:\Program Files\Common Files\Microsoft Shared\DAO\
DAO360.DLL

C:\Program Files\Common Files\Microsoft Shared\Officexx\
(xx is either 10 or 11 based on the version of Microsoft Office you are using.)
MSO.DLL

C:\Program Files\Common Files\Microsoft Shared\VBA\VBA6\
VBE6.DLL

C:\Program Files\Common Files\System\ADO\
MSADO15.DLL
MSADOR15.DLL

C:\Program Files\Microsoft Office\Officexx\
(xx is either 10 or 11 based on the version of Microsoft Office you are using.)
MSACC.OLB

Instructions

1. Ensure all of the files listed above are located on your PC in the appropriate directories. If any of the above noted files is missing, copy it from the support folder on the installation CD to the appropriate directory.

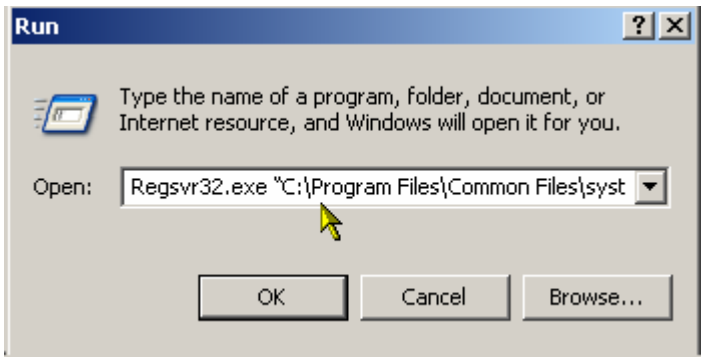
2. Register the files above ending in DLL or OCX. To register a DLL or OCX file:

A. Click **Start**, and then click **Run**.

B. In the **Run** dialog box, type the following command in the **Open** box: Regsvr32.exe, followed by the path (the appropriate directory where files should be located per instructions on previous page) and filename you wish to register and then click **OK**:

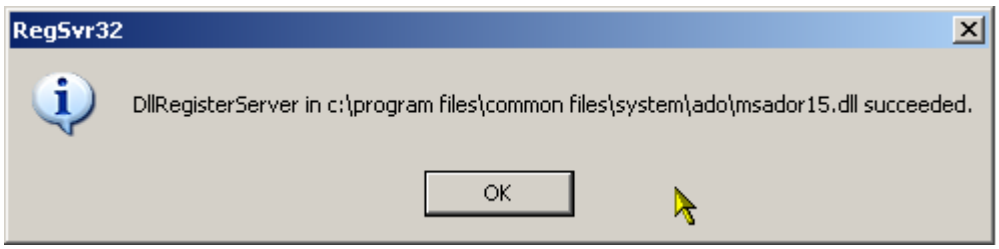
Example:

Regsvr32.exe "C:\Program Files\Common Files\system\ado\Msado15.dll"



NOTE: When there are spaces in any of the file location names, such as Program Files, within the path, you must enclose the entire path in quotation marks.

If the file is successfully registered, you will receive a message that is similar to the following message:



(Repeat this step for all other files you wish to register)

C. Click **OK**.

3. If this still doesn't resolve the issue, reboot your PC.

Automation Error

Problem – The installation seems to have been successful, but when I click the Append Properties function from the Utilities menu, I receive the following message: Automation Error -- Library not registered.

Solution – While the NT uses common Microsoft Library routines, sometimes the reference files are not properly installed or registered on the user's machine. Usually this can be resolved by registering the MSADOX.DLL file located in the C:\Program Files\NFMDCT folder. For registering files, see the example on page B-1.

BureauNet Import

Problem – The BureauNet import process begins, but "hangs" before it is finished.

Solution – This is generally a computer processing issue related to the speed and memory specifications of the PC. See System Requirements in Appendix A for suggested PC configuration and try importing smaller portions of data (fewer records) if necessary.

Problem – When selecting Import BureauNet Data from the Utilities Menu, there is an error message, "The following error has occurred: 438 – Object doesn't support this property or method."

Solution – See Automation Error Solution on page B-3.

Problem – After choosing a file for import, there is an error message, "The Following error has occurred: -2147418113 – Catastrophic failure"

Solution – Make sure you have the correct drill down. There are drill downs with similar but not identical formats to the one used with the tool – the ***Repetitive Loss Data State/Community Drill Down***. Be sure the drilldown being used is in the correct format and refer to Section 4.4.1 of the manual on how to access this data.

Problem – When importing BureauNet data for updates of existing records, the older data are not being replaced with data from the new import. Instead, new records are created.

Solution – Make sure that the Property Locator/Rep Loss number on the record matches the one in the BureauNet spreadsheet. If you appended records to the database from a previous version of the NT, preceding zeros may not have been added to the number to make it seven characters when it was appended. To resolve the situation, you will have to create a new database. You can do this by copying the empty NFMDCT database from the appropriate MS Access folder on the installation CD. From the empty database, append the properties from the original database (the older version of the NT). Double-click the FIXIDS.exe file that is found in the Support folder of the installation CD. Then import the BureauNet data.

Import Latitude/Longitude and Images

Problem – When selecting Import Latitude/Longitude and Images from the Utilities Menu, there is an error message, "The following error has occurred: 438 – Object doesn't support this property or method."

Solution – See Automation Error Solution on page B-3.

Appending Data

Problem – When selecting Append Properties from the Utilities Menu, there is an error message, "The following error has occurred: 438 – Object doesn't support this property or method."

Solution – See Automation Error Solution on page B-3.

Problem – When trying to Append records, an error message comes up that states, "The database you are appending is a more recent version of Microsoft Access. You must convert that database before it can be appended. Please refer to the User Manual's Troubleshooting section for further assistance."

Solution – This message will come up when the user is trying to append records from MS Access 2002/2003 into a database that is in MS Access 2000 format. Records from a database in Access 2002 or 2003 cannot be directly appended to an Access 2000 format database. However, Access 2002 or 2003 databases can

be converted to Access 2000 format relatively easily. To convert a 2002/2003 database to 2000 format, open MS Access, and choose Tools/Database Utilities/Convert Database/To Access 2000 File Format. Then select the Access 2002/2003 database to be converted. After prompting the user to name the new file, MS Access will perform the conversion. Use this new Access 2000 format database to perform the append process.

Problem – I appended data from an older version of the NT and the Property Locator/Rep Loss number does not contain preceding zeroes. Each Property Locator/Rep Loss number contained in the BureauNet import is seven characters with preceding zeros. If the ID you appended is NOT seven characters with preceding zeroes, you won't be able to match this data with the BureauNet data. It must be fixed.

Solution – This will only happen if you append from a previous version of the NT that had this problem. To fix the data, run a utility called FIXIDS.EXE located in the Support folder of the NT. This utility will adjust each Property Locator/Rep Loss number that is less than seven characters to a length of seven characters by inserting zeros in the front of the number so it matches the BureauNet data.

Problem – I appended data more than once from the same database. Some of my image names have changed to include "_01" or "_02" and the disk space used has increased dramatically.

Solution – When you append data into the database, it also appends the images into the NFMDCT folder where your database resides. If a file with the same name already exists in this folder, it will rename the new file by adding a "_01" or "_02" to the end. This also doubles up the amount of disk space used and isn't very efficient.

To correct the situation, you can use one of these two options.

1. Manually remove the extra images by deleting them from each property record.
2. Create a new database and append the data only one time. If there are a lot of renamed images, this may be less time-consuming than option 1. To create a new database, copy the empty NFMDCT database from the appropriate Access folder on the installation CD. Append the data from the original database only one time into the empty database.

Problem – I appended data from a previous version of the NT and the "Total Number of Claims per BureauNet" field on the Insurance screen contains "Unknown."

Solution – This occurs because this field did not exist in the older versions of the NT. To fix the problem, re-import the latest BureauNet data.

Images

Problem – TIF images are not loading on the image screen or being displayed as a thumbnail.

Solution – For some reason, Microsoft Office 2003 does not include TIF graphics filter files which are necessary for proper viewing of TIFs in this application. You can load the necessary files from installation CDs for previous versions of OFFICE (XP). To load the files, load the Microsoft Office CD into the PC and choose Custom Installation. Load the Graphics Filters found under Office Shared Features, Converters, and Filters. Make sure to click on all other entries and apply the "X" so the older applications are not installed.

PDF Documents

Problem – When clicking on a PDF document link, my screen flashes and the document never displays. PDF documents are located throughout the NT application, but reside mostly on the HELP screen.

Solution – **Adobe Reader 7.0 has a known bug where it won't display PDF documents when they are linked from a Microsoft Office document.** If you have Adobe Reader 7.0, uninstall it and download Adobe Reader 6.0 from the Adobe website (www.adobe.com).

Problem – When clicking on a PDF document link, I receive the error "Unable to open …PDF. No program is registered to open this file."

Solution – Several of the supporting documents for the NT are PDFs (Portable Document Format). These documents need Adobe Acrobat Reader in order to open them. You can download Adobe Reader from the Adobe website (www.adobe.com). **Please note the Adobe Reader 7.0 issue in the preceding problem and solution.**

Miscellaneous

Problem – My database continues to grow in size. Can it be compacted?

Solution – Yes it can. Microsoft Access databases do not recover unused space until they are compacted. To compact the database, go to C:\Program Files\NFMDCT and double click on Compact_MDB.EXE. Browse to the database and select the continue button. A backup is always saved in the backup folder before the file is compacted. Do not interrupt the compact process once started. Interrupting the process may corrupt the database. If corrupted, restore the file with the backup file stored in the backup folder

Appendix C – Field Data Collection Suggested Equipment and Forms

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Suggested Field Equipment

- Laptop with the NT installed and up to date BureauNet data imported
- Handheld GPS unit
- Digital camera
- Mapped travel route
- Area road maps and FIRMs

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Address and Updates Tab

Property locator/Repetitive Loss #:_____

Address Updates:

Community_____

CID_____ Incorrect Community and/or Address ☐

NOTES:_____

Street #_____ Name_____ Suffix_____ Unit____

City_____ State_____ Zip_____

County_____ FEMA Region_____

Mitigation Updates:

	Field	FIELD
Unable to Locate Address	☐	
Flood Protection Provided	☐	1:_____
No Building on Property	☐	2:_____
Historic Building	☐	3:_____
		4:_____

NOTES:_____

☐ Additional Research Needed NOTES:_____

Mitigation Observed:

- ☐ Structure appears to have been elevated
- ☐ There is a floodwall, berm, or other type of barrier
- ☐ Drainage improvements appear to have been made
- ☐ Owner/neighbor/local official report mitigation actions taken
- ☐ Other (explain in notes)
- ☐ Structure appears to have been floodproofed
- ☐ Lower area subject to damage appears to have been modified
- ☐ Flood control project should have reduced the threat
- ☐ Further research required

NOTES:_____

Mitigation Verified* ☐ Yes ☐ No ☐ N/A NOTES:_____

**(Verification of FEMA data observed in the field)*

☐ Duplicate Listing / with RL#_____

☐ Updates Made

- Refer to the "Drop Down Menu" on the NT Help screen

Site Observations Tab

Property locator/Repetitive Loss #:_____

Site:

Inspection Date: ____/____/____

Inspector:_____

Latitude: + / - _____ Longitude: + / - _____

No. of Stories_____ Basement ☐

Occupied: ☐ Yes ☐ No ☐ Seasonal Neighborhood:_____ ❶

Residence: ☐ Primary ☐ Rental ☐ Secondary Elevated:_____ ❶

Fill: ☐ Below Street Grade ☐ None ☐ 0-1 Feet ☐ 1-2 Feet ☐ 2-3 Feet

☐ 3-4 Feet ☐ >4 Feet

Land Use:_____ ❶ NOTES:_____

Adequate Vents Present: ☐ Yes ☐ No ☐ N/A ☐ Undetermined

Spoke with: ☐ Owner Name _____

Phone Number _____ Date of Conversation ___/___/___

Expressed Interest in Mitigation: ☐ Yes ☐ No ☐ Uncertain ☐ Not Applicable

☐ Occupant Name _____

Phone Number _____ Date of Conversation ___/___/___

☐ Neighbor Name _____

Phone Number _____ Date of Conversation ___/___/___

NOTES: _____

Flooding this site have community-wide implications: ☐ If yes: select one:_____ ❶

NOTES:

Structure Type:_____ ❶ NOTES:_____

Condition of Structure: ☐ Good (optional minor repairs) ☐ Fair (needs minor repairs)

☐ Poor (needs significant repairs)

Foundation Type:_____ ❶ NOTES:_____

Condition of Foundation: ☐ Good (optional minor repairs) ☐ Fair (needs minor repairs)

☐ Poor (needs significant repairs) ☐ Needs further investigation

EC Diagram Number:_____ ❶

❶ - Refer to the "Drop Down Menu" on the NT Help screen

Appurtenant Structure: ☐ Carport ☐ Shed ☐ Deck ☐ Detached Garage ☐ None Observed ☐ Other

NOTES: _____

HVAC:

Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ
Machinery:	Ʊ	Ductwork:	Ʊ

NOTES: _____

Ʊ - Refer to the "Drop Down Menu" on the NT Help screen

Flood Risk and Mitigation Possibilities Tab

Property locator/Repetitive Loss #: _____

Flood Risk:

FIRM Index Date: ____/____/____ Panel # and Date: _____ ____/____/____

Flood Zone: _____ ʘ BFE/Depth _____

Flood Zone NOTES: _____

_____

Vertical Datam: _____

Likely Source of Flooding: _____ ʘ

NOTES: _____

_____

_____

Likely Areas of Flood Damage: _____ ʘ

NOTES: _____

_____

_____

Potential Hydraulics Impacts: _____ ʘ

Potential Hydraulics Impacts: _____ ʘ

Potential Hydraulics Impacts: _____ ʘ

NOTES: _____

_____

_____

☐ Adequate Clearance

Mitigation observation:

☐ Possible mitigation measures observed ☐ No Possible Mitigation Measures observed

Pending Mitigation Actions:	**Possible retrofitting project:**	**Possible flood control project:**
☐ A pending flood control/drainage improvement project may mitigate the flooding. ☐ Community has plans to mitigate the structure. ☐ Owner has plans to mitigate the structure. ☐ Other (explain in notes)	☐ Structure may be elevated ☐ Structure may be dry floodproofed ☐ Structure may be wet floodproofed ☐ Structure may be protected by a barrier ☐ Structure may be acquired ☐ Structure may be relocated	☐ Removal of undersized culvert or other downstream obstruction ☐ Increase drainage capacity via channel or pumping improvements ☐ Construction of a levee or other barrier ☐ Construction of an upstream storage basin ☐ Other (explain in notes)

ADDITIONAL NOTES: _____

_____

ʘ - Refer to the "Drop Down Menu" on the NT Help screen

Additional Site Information Tab

Property locator/Repetitive Loss #: _____

Regulatory Requirements:

☐ Freeboard Level: ☐ 1.0 ft ☐ 1.5 ft ☐ 2.0 ft ☐ 3.0 ft ☐ Other (explain in notes)

NOTES : _____

☐ Code Height Restrictions NOTES: _____

☐ Compensatory Storage Requirements NOTES: _____

☐ Other Higher Regulatory Standards: NOTES: _____

Equipment/Contents:

Value of Equipment and Contents: $ _____

Describe contents, equipment or inventory of value: _____

Tax ID: _____ Construction Date: ___/___/___

Local Lot/Parcel ID: _____ Building Footprint (Sq. Ft) _____

Total Sq. Ft.: _____

Building Market Value:

Value: $ _____ Date of info: ___/___/___

Source: _____ Source Type: ☐ Certified Appraiser ☐ Community tax record

☐ Other (explain n notes) NOTES: _____

Building Replacement Value:

Value: $ _____ Date of info: ___/___/___

Source: _____

Land Value:

Value: $ _____ Date of info: ___/___/___

Source: _____ Source Type: ☐ Certified Appraiser ☐ Community tax record

☐ Other (explain n notes) NOTES: _____

Source of Information: Date Date

☐ Site Visit ___/___/___ ☐ Owner: ___/___/___

☐ Engineering Study: ___/___/___ ☐ Neighbor: ___/___/___

☐ Local Official: ___/___/___

NOTES: _____

Elevation and Hazard Tab

Property locator/Repetitive Loss #: _____

EC or Elevation Data (Complete only if you have certified data):

Source of Information: _____

Map and Panel #: _____

Date of FIRM Index: ____/____/____ Flood Zones(s): _____ ʘ

BFE/Depth: _____ Building Diagram #: _____

Vertical Datum: ☐ NGVD 1929 ☐ NVGD 1988 ☐ Other Conversion/Comments: _____

Top of bottom floor: _____ Lowest Adjacent Grande: _____

Top of next higher floor: _____ Highest Adjacent Grade: _____

Bottom of lowest horizontal structural member: _____ Number of permanent openings: _____

Total area of permanent opening (flood vents): _____

Attached garage: _____

Lowest elevation of machinery and/or equipment: _____

NOTES: _____

Certifier's Information:

Name: _____

License Number: _____ Street Address: _____

Title: _____

Company Name: _____ City: _____

Telephone number: _____ State: _____ ʘ Zip Code: _____

Additional Flood Hazard Data:

Date of FIS: ____/____/____ Flash Flooding: ☐ Yes ☐ No ☐ Unknown

Date of other source: ____/____/____ Flood Velocity: _____ ft/sec

Describe source *(if other than FIS)*: _____ In floodway: ☐ Yes ☐ No ☐ Unknown

Flood Zone Characteristics: _____ ʘ

NOTES: _____

Freq.	Q (cfs)	Elev (ft)
10 yr.		
50 yr.		
100 yr.		
500 Yr.		

ʘ - Refer to the "Drop Down Menu" on the NT Help screen

Claims Tab

Property locator/Repetitive Loss #: _____

Known Claims:

☐ Additional Claims Filed ☐ Claims Update Required

NOTES: _____

_____

_____

Missing Claims:

Loss Date	Building Payments	Contents Payments	Uninsured Contents	Uninsured Building

Insurance/Claim Information

Property locator/Repetitive Loss #: _____

Insurance Company Number: _____

NFIP Policy Number: _____

Premium: $ _____

NOTES: _____

_____

_____

Events and Total Damages Tab

Property locator/Repetitive Loss #:_____

(More important if detailed FIS information is not available)

Name of Event:_____

Date of Occurrence:____/____/____ Frequency:_____

Source of Frequency Determination: :_____

Flood Depth: ☐ Deep grater that 6 ft. ☐ Shallow 1-3 ft. ☐ Moderate 3-6 ft ☐ Very shallow less than 1 ft.

Flood Velocity: ☐ Slow/Moderate (<5 ft/s) ☐ fast (>5 ft/s)

Flash Flooding: ☐ (<1 hr) ☐ Ice/Debris Flow ☐ Declaration Declared

Were there pollutants in the flood waters that required any special cleanup? ☐ Yes ☐ No

Uninsured damages: Building:__$_____ Contents:__$_____

Name of Event:_____

Date of Occurrence:____/____/____ Frequency:_____

Source of Frequency Determination: :_____

Flood Depth: ☐ Deep grater that 6 ft. ☐ Shallow 1-3 ft. ☐ Moderate 3-6 ft ☐ Very shallow less than 1 ft.

Flood Velocity: ☐ Slow/Moderate (<5 ft/s) ☐ fast (>5 ft/s)

Flash Flooding: ☐ (<1 hr) ☐ Ice/Debris Flow ☐ Declaration Declared

Were there pollutants in the flood waters that required any special cleanup? ☐ Yes ☐ No

Uninsured damages: Building:__$_____ Contents:__$_____

Name of Event:_____

Date of Occurrence:____/____/____ Frequency:_____

Source of Frequency Determination: :_____

Flood Depth: ☐ Deep grater that 6 ft. ☐ Shallow 1-3 ft. ☐ Moderate 3-6 ft ☐ Very shallow less than 1 ft.

Flood Velocity: ☐ Slow/Moderate (<5 ft/s) ☐ fast (>5 ft/s)

Flash Flooding: ☐ (<1 hr) ☐ Ice/Debris Flow ☐ Declaration Declared

Were there pollutants in the flood waters that required any special cleanup? ☐ Yes ☐ No

Uninsured damages: Building:__$_____ Contents:__$_____

Name of Event:_____

Date of Occurrence:____/____/____ Frequency:_____

Source of Frequency Determination: :_____

Flood Depth: ☐ Deep grater that 6 ft. ☐ Shallow 1-3 ft. ☐ Moderate 3-6 ft ☐ Very shallow less than 1 ft.

Flood Velocity: ☐ Slow/Moderate (<5 ft/s) ☐ fast (>5 ft/s)

Flash Flooding: ☐ (<1 hr) ☐ Ice/Debris Flow ☐ Declaration Declared

Were there pollutants in the flood waters that required any special cleanup? ☐ Yes ☐ No

Uninsured damages: Building:__$_____ Contents:__$_____

LIMITED DATA VIEW

Address and Updates Tab

Address Updates

State: All 50 states plus District of Columbia and 7 U.S. territories:

AK	Alaska	KY	Kentucky	NY	New York
AL	Alabama	LA	Louisiana	OH	Ohio
AR	Arkansas	MA	Massachusetts	OK	Oklahoma
AZ	Arizona	MD	Maryland	OR	Oregon
CA	California	ME	Maine	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DC	District of Columbia	MO	Missouri	SD	South Dakota
DE	Delaware	MS	Mississippi	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NC	North Carolina	UT	Utah
HI	Hawaii	ND	North Dakota	VA	Virginia
IA	Iowa	NE	Nebraska	VT	Vermont
ID	Idaho	NH	New Hampshire	WA	Washington
IL	Illinois	NJ	New Jersey	WI	Wisconsin
IN	Indiana	NM	New Mexico	WV	West Virginia
KS	Kansas	NV	Nevada	WY	Wyoming

AS	American Somoa	NoM	Northern Mariana Islands
DC	District of Columbia	PR	Puerto Rico
FSM	Federated State of Micronesia	RMI	Republic of the Marshall Islands
GU	Guam	VI	Virgin Islands

Mitigation Updates

Field 1:

a. The building was elevated to or above the base flood elevation (BFE).
b. The building was elevated, but not to the BFE.
c. The building (non-residential) was floodproofed to the BFE.
d. The building was partially floodproofed (but not to the BFE).
e. The building was protected by a flood control/stormwater management project.
f. The building was replaced by a new elevated/floodproofed building.

Field 2:

g. The building was demolished, but not acquired through any program.
h. The building was acquired and demolished as part of a program.
i. The building was relocated out of the floodplain.

Field 3:

j. Hazard Grant Mitigation Program (HMGP)
k. Flood Mitigation Assistance Program (FMA)
l. Pre-Disaster Mitigation Grant Program (PDM)
m. Section 1362 Acquisition Program
n. Other FEMA Programs
o. Increased Cost of Compliance (ICC) Coverage
p. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG)
q. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
r. Other Federal Program
s. State Program
t. Local Program
u. Property Owner
v. Natural Disaster or Fire
w. Unknown

Field 4:

j. Hazard Grant Mitigation Program (HMGP)
k. Flood Mitigation Assistance Program (FMA)

l. Pre-Disaster Mitigation Grant Program (PDM)
m. Section 1362 Acquisition Program
n. Other FEMA Programs
o. Increased Cost of Compliance (ICC) Coverage
p. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG)
q. U.S. Army Corps of Engineers or Natural Resources Conservation Services (NRCS) Project
r. Other Federal Program
s. State Program
t. Local Program
u. Property Owner
v. Natural Disaster or Fire
w. Unknown

Site Observations Tab

Neighborhood:

Commercial Highway
Commercial Office
Commercial Retail/Downtown
Heavy Industrial
Light Industrial
Residential – high density (multi family/apts)
Residential – low density (single family)
Residential – medium density (2-family/townhouses, rowhouses)
Rural residential

Elevated:

Not Applicable
At Grade
0-1 Feet
1-2 Feet
2-3 Feet
3-4 Feet
4-6 Feet
6-8 Feet
8-12 Feet
>12 Feet

Land Use:

Single-family residential
2-4 family residential
Multifamily residential (5 or more units)
Commercial (highway, office, retail, downtown)
Industrial (light, heavy)
Institutional (hospitals, churches)
Educational (schools, colleges)
Non-profit
Public
Semi-Public
Transportation
Other (explain in notes)

Flooding this site will have community-wide implications:

Important for flood warning/response (e.g. lumber supply companies)
Important for disaster recovery
Important for public health (e.g. wastewater treatment plant)
Contains hazardous materials
Contains special population (e.g. nursing home)
Important utility service
Other (explain in notes)

Structure Type:

Wood frame
Engineered wood frame

Steel
Light steel
Heavy steel
Concrete
Reinforced concrete
Unreinforced concrete
Masonry
Reinforced Masonry
Unreinforced Masonry
Manufactured home
Modular Housing
Other (explain in notes)

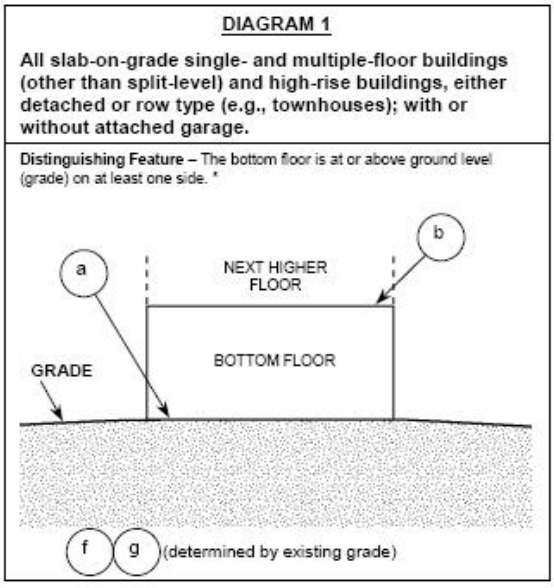
Foundation Type:

Slab-on-grade
Basement sub-grade on all sides
Basement sub-grade with windows
Basement with walkout
Split-level slab-on-grade
Split-level
Piers, posts, piles, columns, or parallel shear walls
Piers, posts, piles, columns, or parallel shear walls w full or partial enclosure
Elevated foundation walls w/full or partial enclosure
Crawlspace – floor at or above grade on at least 1 side
Other (explain in notes)
Unable to determine

Elevation Diagram No. (See diagrams that follow)

1. Slab-on-grade
2. Basement
3. Split level slab-on-grade
4. Other split level
5. Piers, posts, piles, columns, parallel shear walls
6. Piers, posts, piles, columns, parallel shear walls with enclosure
7. Full story foundation walls with enclosure
8. Crawlspace

Unable to determine



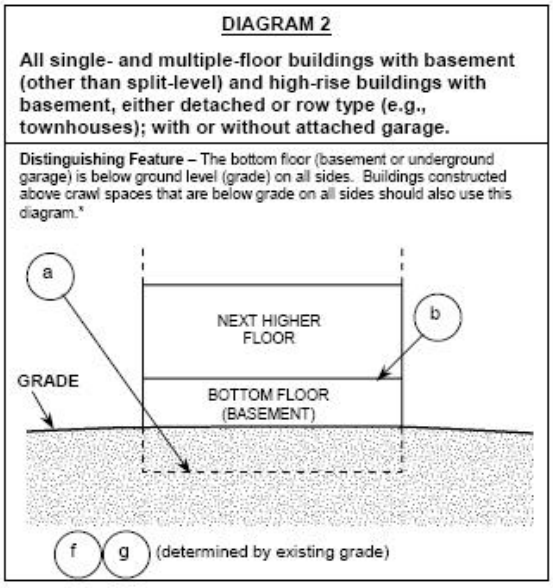


DIAGRAM 3

All split-level buildings that are slab-on-grade, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor (excluding garage) is at or above ground level (grade) on at least one side .*

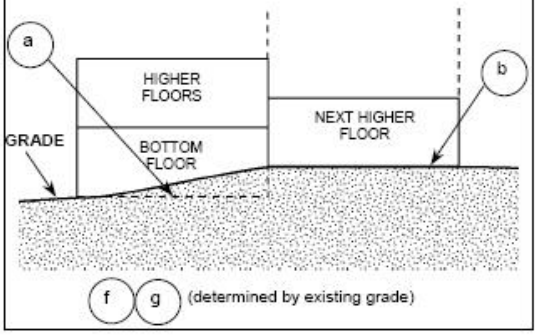


DIAGRAM 4

All split-level buildings (other than slab-on-grade), either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor (basement or underground garage) is below ground level (grade) on all sides. Buildings constructed above crawl spaces that are below grade on all sides should also use this diagram. *

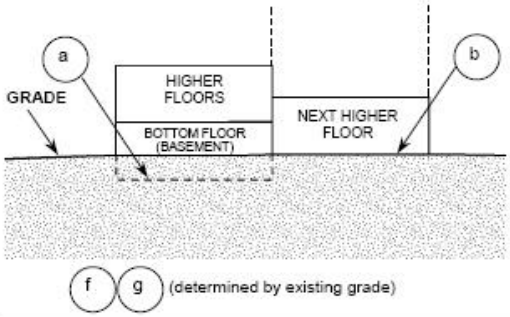


DIAGRAM 5

All buildings elevated on piers, posts, piles, columns, or parallel shear walls. No obstructions below the elevated floor.

Distinguishing Feature – For all zones, the area below the elevated floor is open, with no obstruction to flow of flood waters (open lattice work and/or readily removable insect screening is permissible).

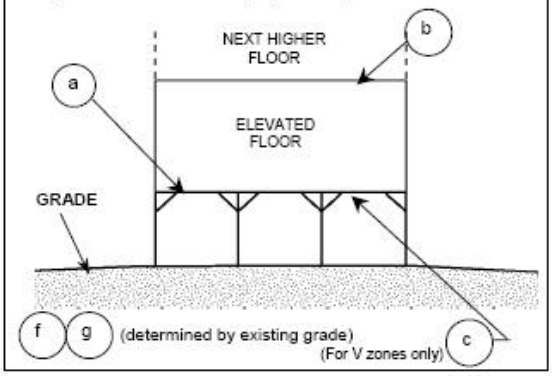
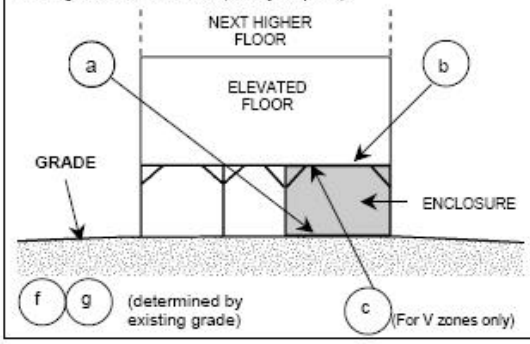
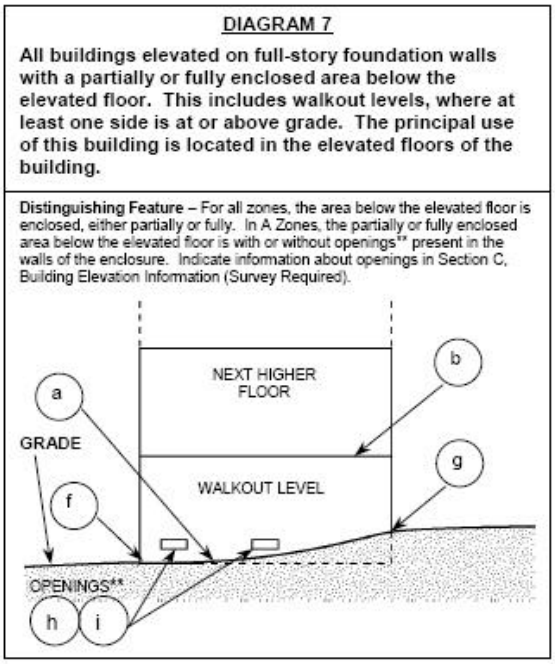


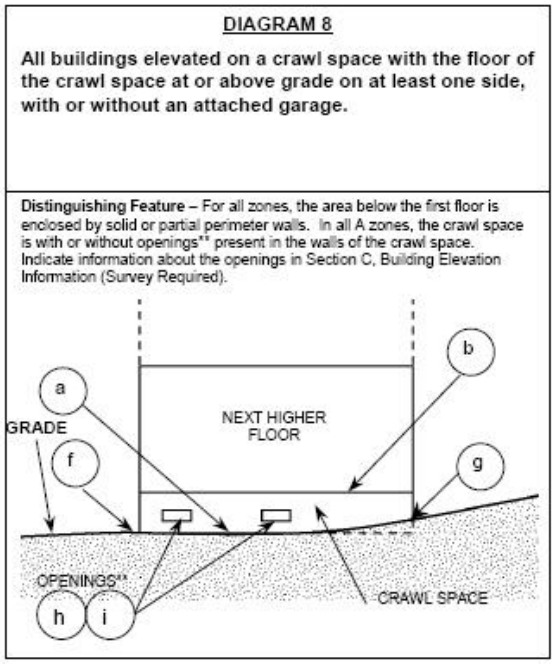
DIAGRAM 6

All buildings elevated on piers, posts, piles, columns, or parallel shear walls with full or partial enclosure below the elevated floor.

Distinguishing Feature – For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings** present in the walls of the enclosure. Indicate information about openings in Section C, Building Elevation Information (Survey Required).







HVAC

Machinery (select all that apply):

Crawlspace/under elevated floor
Inside-in basement
Inside-on first floor
Inside-on second floor or higher
Outside-At/close to grade
Outside-Lower than first floor
Outside-Higher than first floor
Cannot tell
Other (explain in notes)

Duct Work (select all that apply):

Crawlspace/under elevated floor
Inside-in basement
Inside-on first floor
Inside-on second floor or higher
Outside-At/close to grade
Outside-Lower than first floor
Outside-Higher than first floor
Cannot tell
Other (explain in notes)

Flood Risk and Mitigation Possibilities Tab

Flood Risk

Flood Zone:

AR
A99
A
AO
AE A1-30
AH
V
VE V1-30
B/XShaded
C/XUnshaded

Likely Source of Flooding:

Stream or other source of riverine flooding
Ocean, lake or other source of coastal flooding
Sheet flow
Natural drainage-Site is flat or drains poorly
Natural drainage-Ponding, or site is low or site is in a bowl
Natural drainage-Exceptionally heavy precipitation overwhelmed drainage system
Drainage System -Undersized culvert or inadequate drainage feature downstream
Drainage System -Drainage from lot is blocked by roadbed or other feature
Drainage System -System can't handle runoff from recent upstream development
Sewer backup
Cannot tell
Other (explain in notes)

Likely Areas of Flood Damage:

Water over 1st floor-Flood level higher than floor level
Water over 1st floor-Building is on slab clos e to grade
Water below 1st floor-Water in crawlspace
Water below 1st floor-Water in enclosed area below elevated floor
Water in areas below grade-Building is a bilevel, split level or has finished areas below grade
Water in areas below grade-Building has basement with below grade window wells or stairwell
Water in areas below grade-Building has basement, no obvious entry point for water
Damage to items outside the structure-Likely damage to deck, bulkhead, etc.
Damage to items outside the structure-Outside A/C unit is low
Damage to items outside the structure-Storage tanks present
Cannot tell
Other (explain in notes)

Potential Hydraulics Impacts (select all that apply):

Low Bridge
Culvert(s)
Storm Drainage System
Planned Projects
Pump Stations
Dams
Levees
Run off from U/S dev.
Retention Basins
Detention Basins
Other (explain in notes)

DETAILED DATA VIEW

Elevation and Hazard Tab

EC or Elevation Data (complete only if you have certified data)

Flood Zones(s):

AE A1-30
V
VE V1-30
B/XShaded
C/XUnshaded
AO
AH
AR
A99
A

State: All 50 states plus District of Columbia and 7 U.S. territories:

AK	Alaska	KY	Kentucky	NY	New York
AL	Alabama	LA	Louisiana	OH	Ohio
AR	Arkansas	MA	Massachusetts	OK	Oklahoma
AZ	Arizona	MD	Maryland	OR	Oregon
CA	California	ME	Maine	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DC	District of Columbia	MO	Missouri	SD	South Dakota
DE	Delaware	MS	Mississippi	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NC	North Carolina	UT	Utah
HI	Hawaii	ND	North Dakota	VA	Virginia
IA	Iowa	NE	Nebraska	VT	Vermont
ID	Idaho	NH	New Hampshire	WA	Washington
IL	Illinois	NJ	New Jersey	WI	Wisconsin
IN	Indiana	NM	New Mexico	WV	West Virginia
KS	Kansas	NV	Nevada	WY	Wyoming

AS	American Somoa	NoM	Northern Mariana Islands
DC	District of Columbia	PR	Puerto Rico
FSM	Federated State of Micronesia	RMI	Republic of the Marshall Islands
GU	Guam	VI	Virgin Islands

Flood Zone Characteristics:

Riverine
Coastal
Sheet flow
Shallow floods
Ponding
Ice jams
Sewer backflow
Other

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Appendix D – Regional Repetitive Loss Coordinators

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Regional Repetitive Loss Coordinators

as of April 27, 2005

REGION	MAIN CONTACT	CONTACT PHONE #	BACKUP CONTACT	SUPERVISOR
I	Daisy Sweeney*	617-223-4179	Fred Vanderschmidt 617-223-4184	Steve Coleman
II	Pat Griggs	212-680-3625	Scott Duell* 212-680-3630	Mary Colvin
III	David Thomas	215-931-5506	Joe Zagone 215-931-5542	Gene Gruber
IV	David L. Thomas	770-220-5457	Robert Durrin 770-220-5428	Brad Loar
V	Eric Kuklewski	312-408-5230		Terry Fell
VI	Greg Solovey	940-898-5143	Dennis Lee 940-898-5260	Ross Richardson
VII	Georgia Wright	816-283-7539	Julie Silvers 816-283-7959	Phil Kirk
VIII	Bonnie Heddin*	303-235-4739		Robert Ives
IX	Mike Hornick*	510-627-7260		Michael Shore
X	Denise Atkinson	425-487-4677	Bruce Knipe	Mark Carey

* Region's FMA coordinator

REPETITIVE LOSS TEAM AT FEMA HEADQUARTERS

Cynthia Pollnow
202-646-4636

Errol Garren
202-646-3678

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Appendix E –NT Sample Reports

The following Sample Reports were generated using the NT with fabricated property addresses and Property Locator Numbers for the purposes of providing examples in this manual.

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Basic Report

Property Locator / Rep Loss # 0123456

Community Name/CID # SUSSEX COUNTY* #100029
Address: 38 BEACHFRONT AVE , BETHANY BCH, DE 19930
Latitude: 38.587496 **Longitude** -75.065432

Tax ID: 66552
Local Lot/Parcel ID: H8-521-05
Foundation Type:
Slab-on-grade

Condition of Foundation: Fair (needs minor repairs)
Structure Type: Wood Frame
EC Diagram No
1. Slab-on-grade
Condition of Structure: Fair (needs minor repairs)
Bldg Mkt Value: $300,000.00 **Land Value:** $300,000.00
Currently Occupied: Yes **Occupancy:** SINGLE FMLY
Residence: Primary **Land Use:** Single-family residential
Flood Zone: VE V1-30
Top of Bottom Floor: 9.10 ft. **BFE/Depth** 12
Top of Next Higher Floor:
Lowest Adjacent Grade: 8.80 ft.
Bottom of Lowest Horizontal Structural Member: 9.10 ft.

Likely Source of Flooding:
Ocean, lake or other source of coastal flooding

Notes: Atlantic Ocean. Landward of road adjacent to coast that sees overwash in moderate and heavy surge events.

Likely Areas of Flood Damage:
Water over 1st floor-Building is on slab close to grade

Notes: Pre-firm structure located at grade.

Potential Hydraulics Impacts:
Planned Projects,

Notes: Beach replenishment/dune restoration under discussion with community, state env agency, and USACE.

Pre or Post FIRM: Pre **Total Sq. Ft.:** 1200
Date of Construction: 1/1/1988 **No. of Stories:** 1

Mitigation Observations

☑ **Possible mitigaton measures observed**

Pending Mitigation Actions:
A pending flood control/drainage improvement project may mitigate the flooding,

Notes:

Structure may be protected with a retrofitting project:
Structure may be: elevated;

Notes: Elevation would be difficult b/c of slab foundation, but given the property value, size, and past damages, it might be cost beneficial. Acq pro (more...)

Flooding may be relieved by a flood control project:
Other (explain in notes)

Notes: beach renourishment project being discussed

Most Recent Claims and Summary

Current Insured's Name: WALLY & AMANDA SMITH
Name of Last Claimant: WALLY & AMANDA SMITH

No. of Claims per BureauNet: 9

	Building	Contents	Total
Total Payments Made:	$132,799.38	$12,488.16	$145,287.54

Date	Building	Contents	Total
2/5/1998	$51,349.42	$2,596.87	$53,946.29
1/28/1998	$10,824.91	$403.64	$11,228.55
1/7/1996	$11,309.92	$0.00	$11,309.92
3/3/1994	$4,292.57	$0.00	$4,292.57

Mitigation Updates

	Field	*FEMA*	*Field*	*FEMA*
Unable to Locate Property	☐	☐		
Flood Protection Provided	☐	☐	1 ☐	1 ☐
No Building on Property	☐	☐	2 ☐	2 ☐
Historic Building	☐	☐	3 ☐	3 ☐
Notes:			4 ☐	4 ☐

☐ **Additional Research Needed**
Notes:

Mitigation Observed:
Notes:

Mitigation Verified:
Notes:

☐ **Updates Made** ☐ **Duplicate Listing / with RL #:**

Benefit-Cost

Community Name / CID#: HOPKINSVILLE, CITY OF / 210055

 # 1 **Property Locator / Rep Loss #:** 0066556

Latitude: 36.84206
Longitude: -87.51253

Address 305 SPRING ST
HOPKINSVILLE, KY 422403975

Tax ID: 240-00 04 048.00
Local Lot/Parcel ID:

Occupied? Yes **Construction Date** 1/1/1972 **Tot. Floor Area (sq ft):** 1550

Land Use? Single-family residential

Structure Type: Masonry **Number of Stories:** 1 **Basement:** No

Foundation Type: Crawlspace - floor at or above grade on at least 1 side

HVAC Location: • Outside-At/close to grade **Ductwork Location:** • Cannot tell

Other Structures on the Lot?

		As of Date:
Bldg Market Value:	$56,000.00	5/20/2003
Bldg Replacement Value:	Unknown	Unknown
Land Value:	Unknown	Unknown
Property Value:	$52,500.00	1/31/2005
Equipment/Content Value:	$0	

Notes:

Flood Zone: AE A1-30 **Base Flood Elevation:** 156.4

Source of Flooding: Stream or other source of riverine flooding

Potential Hydraulics Impact: Other (explain in notes) **Notes:** sinkholes in area

Source of EC or Elevation data: surveying work completed for state env. Agency

Bottom of lowest horizontal structural member:

Top of Bottom Floor: 149.20 **Top of Next Higher Floor:** 157.20

Lowest Adjacent Grade: 147.50 **Highest Adjacent Grade:** 149.10

Lowest elevation of machinery and/or equipment:

Date of FIS: 9/10/1995 **Date of Other Source:**

Other Source of Flood Data:

Flood Frequency	Discharge (cfs)	Elevation (ft)
10 yr.	3850.0	149.6
50 yr.	4200.0	153.2
100 yr.	4920.0	156.4
500 yr.	5388.0	159.8

Event Name	Date	Freq.	Frequency Source	Depth	Velocity
heavy rain flooding - may 2002	5/10/2002	75	NWS determination - based on gage readings in area. Report attached.	Moderate, 3-6 ft.	Slow/Moderate (<5 ft/s)

CID Summary

CID # 190242 **Community Name: DAVENPORT, CITY OF**

Property Locator / Rep Loss #	Address	City	State	Zip
0012343	3131 RUDOLPH ST	DAVENPORT	IA	528031118
0012344	3000 GARREN ST	DAVENPORT	IA	528020000
0012345	598 GRZESIK BLVD	DAVENPORT	IA	528064159
0012346	UNIT 14, 4500 S GARREN ST	DAVENPORT	IA	528023133
0022221	4520 LORRAINE DR	DAVENPORT	IA	52802
0022222	4400 S GEORGE WY	DAVENPORT	IA	52802
0022223	4111 GARREN ST	DAVENPORT	IA	52802
0045649	4242 S FRONT ST	DAVENPORT	IA	528023111
0045650	BLDG 2, 3838 S JENNIFER DR	DAVENPORT	IA	52802
0045651	4666 SAGES ST	DAVENPORT	IA	52802
0045664	3737 S GEORGE ST	DAVENPORT	IA	528023106
0045665	800 S JENNIFER DR	DAVENPORT	IA	528022905
0045666	4566 LAUREL LN	DAVENPORT	IA	52802
0077776	4555 S GARREN ST	DAVENPORT	IA	528023132
0077777	4646 S GEORGE WY	DAVENPORT	IA	528023117
0077778	5888 SAGES ST	DAVENPORT	IA	528020000
0088821	3456 LORRAINE DR	DAVENPORT	IA	52802
0088822	4444 PARKER ST	DAVENPORT	IA	528040000
0088823	4588 LAUREL LN	DAVENPORT	IA	528023100
0088997	4444 LAUREL LN	DAVENPORT	IA	528023107
0088998	3333 S JENNIFER DR	DAVENPORT	IA	52802
0088999	4533 SAGES ST	DAVENPORT	IA	528023116
0098763	6565 GRZESIK BLVD	DAVENPORT	IA	528023212
0098764	2222 GARREN ST	DAVENPORT	IA	528022905
0098765	1104-1120 MCCORMICK ST	DAVENPORT	IA	528030000
0098766	4599 LORRAINE DR	DAVENPORT	IA	528023133
0099995	4777 SAGES ST	DAVENPORT	IA	52802
0099998	4545 S FRONT STREET	DAVENPORT	IA	52802
0099999	3939 S JENNIFER DR	DAVENPORT	IA	528023108

Community Summary

Number of Properties Inventoried by CID

Community Name / CID #	Number of Properties Inventoried
SONOMA COUNTY */60375	95

Number of Properties Requiring Updates

	New	Field Verified	FEMA
Incorrect Community and/or Address	N/A	9	N/A
Unable to Locate Property	3	3	0
Flood Protection Provided	0	1	11
No Building on Property	6	6	0
Historic Building	2	2	0

Number of Properties Reported as Mitigated

	Number Observed	Number Verified
Appears to have been elevated	26	26
Appears to have been floodproofed	1	1
Floodwall, berm, or other type of barrier	0	0
Lower area appears to have been modified	0	0
Drainage improvements appears to have been made	3	2
Flood control project reduced the threat	0	0
Owner/neighbor/local official reported mitigation action taken	3	2
Further research needed	0	0
Other	0	0

Number of Properties By Flood Source:

	Number
Stream	76
Coastal	0
Sheet flow	3
Natural drainage	3
Drainage system	10
Sewer backup	0
Cannot Tell	0
Other	0

Number of Properties By Land Use:

	Number
Single-family residential	54
2-4 family residential	0
Multi-family residential (5 or more)	21
Commercial (hwy, ofc, retail, etc.)	12
Industrial (light, heavy)	0
Institutional (hospitals, churches)	0
Educational (schools, colleges)	0
Non-profit	0
Public	0
Semi-Public	0
Transportation	0
Open space	0
Other	0

Photo Summary

Property Locator/Rep Loss #

0005555

Community Name/CID#:

SONOMA COUNTY * / 60375

Property Address:

100 NATURE HIGHWAY
MONTE RIO, CA 95462

Latitude: 38.471860

Longitude: -123.012261

Tax ID:

Local Lot/ Parcel ID: 071-341-018-000

\NFMDCT\100 nat hwy side.JPG

\NFMDCT\100 nat hwy sanitary sewer piping.JPG

\NFMDCT\100 nat hwy rear.JPG

\NFMDCT\100 nat hwy front entry.JPG

\NFMDCT\100 nat hwy.JPG

Properties Requiring Action/Update

Property Locator/Rep Loss # 0123456
Community Name/CID#: SUSSEX COUNTY* / 100029
Property Address: 38 BEACHFRONT AVE
BETHANY BCH, DE 19930
Latitude: 38.587496
Longitude: -75.065432
Tax ID: 66552
Local Lot/Parcel ID: H8-521-05
Current Insured's Name: WALLY & AMANDA SMITH
Last Claimant's Name: WALLY & AMANDA SMITH

ACTION/UPDATED ITEMS

Incorrect Community and/or Address

Address Updates

New Community: Sussex County **New CID:** 100029
New Address: 38 Front St
New City,State Zip: Bethany Beach, DE 19930

Property Locator/Rep Loss # 0027272
Community Name/CID#: HOPKINSVILLE, CITY OF / 210055
Property Address: 1200 20TH ST
HOPKINSVILLE, KY 422400000
Latitude: 36.872461
Longitude: -87.502652
Tax ID:
Local Lot/Parcel ID:
Current Insured's Name: DANIEL WHITE
Last Claimant's Name: DANIEL WHITE

ACTION/UPDATED ITEMS

Mitigation and Funding Codes*

Field	FEMA	Field	FEMA

No building on Property: X

Mitigation Observed: Other (explain in notes)

Only a vacant lot remains (see photos #2 and 3). The first photo is the address lext to the lot - 1201 W 7th.

Mitigation Verified: N/A

Properties Requiring Action/Update

Property Locator/Rep Loss # 0066556
Community Name/CID#: HOPKINSVILLE, CITY OF / 210055
Property Address: 305 SPRING ST
HOPKINSVILLE, KY 422403975
Latitude: 36.84206
Longitude: -87.51253
Tax ID: 240-00 04 048.00
Local Lot/Parcel ID:
Current Insured's Name: GRAHAM, DAVID & SARAH
Last Claimant's Name: HARRIS, SHERMAN & WILMA

ACTION/UPDATED ITEMS

Additional Research Needed: A stormwater improvement project was completed in the early 1990's to mitigate the area's flooding due to a sinkhole. Additional, low level flooding has occurred, but not to the extent of previous flood events.

Mitigation and Funding Codes*

	Field	FEMA	Field	FEMA
Flood Protection Provided:	X		1:	e

Mitigation Observed: Owner/neighbor/local official report mitigation actions taken

Mitigation Verified: N/A

* Key to Mitigation Codes:
a. The building was elevated to or above the Base Flood Elevation (BFE).
b. The building was elevated but not to the BFE.
c. The building (non-residential) was floodproofed to the BFE.
d. The building was partially floodproofed (but, not to the BFE).
e. The building was protected by a flood control/stormwater mgmt project.
f. The building was replaced by a new elevated/floodproofed building.
g. The building was demolished, but not acquired through any program.
h. The building was acquired and demolished as part of a program.
i. The building was relocated out of the floodplain.

* Key to Funding Codes:
j. Hazard Mitigation Grant Program (HMGP)
k. Flood Mitigation Assistance Program (FMA)
l. Pre-Disaster Mitigation Grant Program (PDM)
m. Section 1362 Acquisition Program
n. Other FEMA Programs
o. Increased Cost of Compliance (ICC) coverage
p. U.S. Housing _Urban Development (HUD) Community Development Block Grant (CDBG)
q. U.S. Army Corps of Engineers or Natural Resources Conservation Service (NRCS) Project
r. Other Federal Program
s. State Program
t. Local Program.
u. Property Owner
v. Natural Disaster or Fire
w. Unknown

*Severe Repetitive Loss Structures**

This report is based on current information available from the NFIP Bureau and Statistical Agent. Actual inclusion in the Severe Repetitive Loss sub-group definition is subject to data analysis and FEMA verification of claims history and/or property value.

Community Name/CID#: SONOMA COUNTY * / 60375

 # 1 **Property Locator/Rep Loss #** 0033222

Address: 1688 HILL ST
GUERNEVILLE, CA 954460000

Latitude: 38.503177 **Tax ID:**

Longitude: -122.994271 **Local Lot/Parcel ID:**

Currently Issured? YES **Property Value:** $110,400.00

Occupancy: SINGLE FMLY **No. of Claims per BureauNet:** 2

Date	Building	Contents	Total
3/10/1995	$63,416.77	$52,091.01	$115,507.78
1/1/1997	$49,317.12	$0.00	$49,317.12
Tot Payments Made	$112,733.89	$52,091.01	$164,824.90
Avg Payments	$56,366.95	$26,045.51	$82,412.45

Community Name/CID#: SUSSEX COUNTY* / 100029

 # 2 **Property Locator/Rep Loss #** 0123456

Address: 38 BEACHFRONT AVE
BETHANY BCH, DE 19930

Latitude: 38.587496 **Tax ID:** 66551-22-256521

Longitude: -75.065432 **Local Lot/Parcel ID:** H8-521-05

Currently Issured? Special Direct Facility **Property Value:** $225,350.00

Occupancy: ASSMD CONDO **No. of Claims per BureauNet:** 7

Date	Building	Contents	Total
10/31/1991	$2,565.00	$0.00	$2,565.00
1/4/1992	$19,961.00	$6,388.00	$26,349.00
12/10/1992	$2,479.50	$0.00	$2,479.50
3/3/1994	$4,292.57	$0.00	$4,292.57
3/8/1994	$11,309.92	$0.00	$11,309.92
1/28/1996	$10,824.91	$403.64	$11,228.55
2/5/1998	$51,349.42	$2,596.87	$53,946.29
5/5/1999	$5,560.00	$1,100.00	$6,660.00
Tot Payments Made	$108,342.32	$10,488.51	$118,830.83
Avg Payments	$13,542.79	$1,311.06	$14,853.85

*Severe Repetitive Loss Structures**

This report is based on current information available from the NFIP Bureau and Statistical Agent. Actual inclusion in the Severe Repetitive Loss sub-group definition is subject to data analysis and FEMA verification of claims history and/or property value.

Community Name/CID#: AMES, CITY OF / 190254

 # 3 **Property Locator/Rep Loss #** 0044499

Address: 800 N 38TH ST
AMES, IA 500106444

Latitude: 42.031975 **Tax ID:**

Longitude: -93.616259 **Local Lot/Parcel ID:**

Currently Issured? Special Direct Facility **Property Value:** $250,648.00

Occupancy: OTHER RESID **No. of Claims per BureauNet:** 4

Date	Building	Contents	Total
5/29/1985	$5,266.88	$0.00	$5,266.88
5/29/1988	$12,863.88	$0.00	$12,863.88
6/16/1990	$5,212.97	$0.00	$5,212.97
7/8/1993	$40,000.00	$0.00	$40,000.00
Tot Payments Made	$63,343.73	$0.00	$63,343.73
Avg Payments	$15,835.93	$0.00	$15,835.93

Community Name/CID#: COVINGTON, CITY OF / 210129

 # 4 **Property Locator/Rep Loss #** 0088889

Address: 432 MONROE RD
COVINGTON, KY 410165599

Latitude: 39.074190 **Tax ID:** 69854-57-846957

Longitude: -84.521027 **Local Lot/Parcel ID:** G55-254-05.88

Currently Issured? YES **Property Value:** $68,600.00

Occupancy: 2-4 FAMILY **No. of Claims per BureauNet:** 4

Date	Building	Contents	Total
6/1/1996	$2,402.35	$2,797.70	$5,200.05
7/1/1996	$24,082.35	$10,797.70	$34,880.05
6/16/1997	$7,327.36	$0.00	$7,327.36
6/11/1998	$10,629.43	$0.00	$10,629.43
Tot Payments Made	$44,441.49	$13,595.40	$58,036.89
Avg Payments	$11,110.37	$3,398.85	$14,509.22

** A property is a severe Repetitive Loss property when it meets these three criteria:*

1. The Insured Status is YES or SDF.

2. It has at least 4 claims where each claim is >= $5000 (building and contents) OR the total of 2 or more claims (building only) equal or exceed the value of the structure and the value of the structure is greater than 0.

3. The Occupancy is SINGLE FMLY, 2-4 FAMILY, OTHER RESID or ASSMD CONDO.

Suggested Mitigation Options

 # 1 **Property Locator/Rep Loss #:** 0066556

Community Name/CID#: HOPKINSVILLE, CITY OF / 210055

Property Address 305 SPRING ST
HOPKINSVILLE, KY 422403975

Latitude: 36.84206

Longitude: -87.51253

Tax ID:

Local Lot/Parcel ID: 240-00 04 048.00

Owner Interested in Mitigation?

Current Insured's Name: GRAHAM, DAVID & SARAH

Last Claimant's Name: HARRIS, SHERMAN & WILMA

Flooding may be Relieved by a Flood Control Project:

Increase drainage capacity via channel or pumping improvements

 # 2 **Property Locator/Rep Loss #:** 0165432

Community Name/CID#: HOPKINSVILLE, CITY OF / 210055

Property Address 888 HEART DR
HOPKINSVILLE, KY 422405111

Latitude: 36.84750

Longitude: -87.53149

Tax ID:

Local Lot/Parcel ID: 250-00 01 025.00

Owner Interested in Mitigation? Yes

Current Insured's Name: BETTY MILLER

Last Claimant's Name: BETTY MILLER

Structure may be Protected with a Retrofitting Project:

Structure may be elevated
Structure may be dry floodproofed
Structure may be wet floodproofed
Structure may be acquired

Suggested Mitigation Options

 # 3 **Property Locator/Rep Loss #:** 0123456

Community Name/CID#: SUSSEX COUNTY* / 100029

Property Address 38 BEACHFRONT AVE
BETHANY BCH, DE 19930

Latitude: 38.587496

Longitude: -75.065432

Tax ID: 6651-22-256521

Local Lot/Parcel ID: H8-521-05

Owner Interested in Mitigation? Yes

Current Insured's Name: WALLY & AMANDA SMITH

Last Claimant's Name: WALLY & AMANDA SMITH

Pending Mitigation Actions:

A pending flood control/drainage improvement project may mitigate the flooding.

Structure may be Protected with a Retrofitting Project:

Structure may be elevated

Elevation would be difficult b/c of slab foundation, but given the property value, size, and past damages, it might be cost beneficial. Acq probably too expensive.

Flooding may be Relieved by a Flood Control Project:

Other (explain in notes)

beach renourishment project being discussed

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Appendix F –Site Data Collection Notification and/or Explanation Letters

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SAMPLE PRE-NOTIFICATION LETTER FOR FEMA OR FEMA CONTRACTOR FIELD CREWS DOING MITIGATION DATA COLLECTION

U.S. Department of Homeland Security
500 C Street, SW
Washington, D.C. 20472

FEMA

[DATE]

[Name]
[Address]
[City, State, Zip Code]

Dear [Resident]

Your property is either currently, or at some point in the past was, insured by the National Flood Insurance Program (NFIP) for damage from flooding. Flood insurance is underwritten by the National Flood Insurance Program (NFIP), a program that is administered by the Federal Emergency Management Agency (FEMA). FEMA has identified structures that have sustained repetitive flooding and have received claims payments on at least two occasions.

The NFIP allows occupants and owners with property vulnerable to flooding to purchase flood insurance; private companies generally do not underwrite flood insurance because of the high risk involved. In order to continue to keep flood insurance premiums affordable, FEMA and the NFIP must try to address those structures that are repetitively flooded.

[AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] is currently surveying these repetitively flooded properties to collect data that will help FEMA understand why these structures are vulnerable to flooding and damages, and what mitigation measures may be feasible to protect them from future damages.

This letter is an early notification that you will be visited by a representative of [AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] within a few weeks. That person will have identification and a copy of a letter similar to this one confirming his or her authorization to conduct this survey on behalf of FEMA.

The [AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] will need about 30 minutes to observe features about the building's construction, assess the building's flood vulnerabilities, and take a few photos.

We look forward to your cooperation in this important data collection effort. If you have any questions regarding this survey, please contact [REGIONAL RL COORDINATOR OR PROJECT OFFICER] at [telephone number].

Sincerely,

FEMA Project Officer

SAMPLE LETTER FOR FEMA OR FEMA CONTRACTOR FIELD CREWS DOING MITIGATION DATA COLLECTION

U.S. Department of Homeland Security
500 C Street, SW
Washington, D.C. 20472

FEMA

[DATE]

[Name]
[Address]
[City, State, Zip Code]

Dear [Resident]:

Your property has been identified as having experienced repetitive damage and losses from flooding and is either currently or at some point in the past was insured by the National Flood Insurance Program (NFIP) for damage from flooding. The National Flood Insurance Program (NFIP), a program that is administered by the Federal Emergency Management Agency (FEMA), underwrites flood insurance. FEMA has identified structures that have sustained repetitive flooding and have received claims payments for two or more events.

[AGENCY OR CONTRACTOR ON BEHALF OF AGENCY] is currently surveying these repetitively flooded properties to collect data that will help FEMA understand why these structures are vulnerable to flooding and damages, and what mitigation measures may be feasible to protect them from future damages. This letter is a confirmation that [NAME AND AGENCY OF INSPECTOR] is authorized to conduct this survey on behalf of FEMA. [NAME and/or AGENCY] will have proper photo identification with them and a copy of this letter.

The data collection effort will take approximately 30 minutes and will include collection of information about the building's construction and flood vulnerabilities. Some photos will also be taken.

We look forward to your cooperation in this important data collection effort. If you have any questions regarding this survey, please contact [REGIONAL RL COORDINATOR OR PROJECT OFFICER] at [telephone number].

Sincerely,

FEMA Project Officer

SAMPLE LETTER FOR LOCAL AGENCIES WITH FIELD CREWS DOING MITIGATION DATA COLLECTION

[DATE]

Dear [Resident];

[ENTER AGENCY'S NAME or CONSULTANT ON BEHALF OF….] is conducting a study of properties that may be at risk for repetitive flood damage. The outcome of the study will identify structures in need of flood mitigation, determine what mitigation measures may be appropriate for each structure, and may develop an initial cost estimate for providing the recommended measure(s).

Mitigation measures may include elevating buildings, wet or dry flood proofing, relocation, acquisition, or construction of flood control structures. Upon completion of the study [ENTER AGENCY] plans to apply for Federal Grants and obtain the additional local cost share necessary to assist willing property owners in mitigating their flood prone buildings.

The study involves the collection of the following property level data elements:

1. Building Permit Records (including application and associated materials)
    - Date of Original Permit
    - Square footage
2. Structure and site elevation information (elevation certificate if available)
3. Tax ID and Lot and Parcel Number
4. Building Property Value on record (Assessed Value, Replacement Value or Both)
5. Land Property Value on record
6. Building Code/Floodplain Development Regulations Exceeding Minimum Standards
7. Historical flood events information
    - When
    - How much damage to community
    - How did it affect property
    - Estimated frequency of event

In addition, [AGENCY OR CONSULTANT NAME] will visit each property to survey the flood risk and to take photographs. Property owners are encouraged to visit with the surveyors to discuss any relevant flooding issues.

You can help us prepare mitigation plans and apply for funding by facilitating [CONSULTANT OR AGENCY NAME] in their information and data collection needs, and also by validating field observations. If you have any questions, feel free to call [POC OF SPONSERING AGENCY].

Sincerely,

[AGENCY POC or REP]

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Appendix G –FEMA AW-501 Form and Instructions

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FEMA

2005 INSTRUCTIONS FOR COMPLETING THE NFIP REPETITIVE LOSS (RL) UPDATE AW-501 WORKSHEET

These instructions explain to communities participating in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) how to make updates on the NFIP Repetitive Loss (RL) Update AW-501 Worksheet. If you have any questions on how to apply these instructions or any other repetitive loss issues, we suggest contacting either the person responsible for NFIP Repetitive Loss Updates identified below or your assigned ISO/CRS Specialist.

Please read Section 501 in the *CRS Coordinators Manual* before completing these worksheets. All communities applying to and participating in the CRS with one or more repetitive loss properties will receive the NFIP Repetitive Loss Update Worksheet. We recognize there are many reasons why the property address information needs to be corrected on the community repetitive loss list. The RL Update Worksheet was developed to update any known errors on the list while making this process as easy and simple to use as possible.

PROCEDURES

It is the responsibility of all CRS communities with at least one repetitive loss property to review and update the worksheets, if applicable. Please review the properties listed under "Current Property Address" and select one or more of the seven update choices provided in the REQUESTED UPDATES section. All requested updates should be clearly legible. You should keep a photocopy of the original document for your records. **Please submit only those RL Update Worksheets you have updated and attach the transmittal sheet.** If you are submitting a new CRS application, modification, or will be undergoing a cycle application in 2005, the updated worksheets should be included in the documentation materials provided to your ISO/CRS Specialist. If you are providing voluntary updates, please send the updated worksheets and all necessary supporting documentation to the following NFIP Repetitive Loss Update address as soon as possible, but **no later than December 1, 2005:**

NFIP Repetitive Loss Updates, c/o Mr. Gabe Gambrill, AIS, CFM; ISO, Inc. Post Office Box 3085, Ponte Vedra Beach, FL 32004-3085. You may also provide the updated worksheet (AW-501) and any required supporting documentation electronically by emailing the documents to hgambrill@iso.com.

"Repetitive Loss Number" -- This number is assigned by the RL database computer and is primarily used for FEMA internal program tracking. The RL number may also be referred to as a property locator number and will likely be referred to in correspondence or discussions concerning submitted updates.

"Local Property Identifier" -- This optional information such as Tax Assessor's number, Lot & Block, etc; is provided by the community. Communities have requested the inclusion of this local information in FEMA's RL database to better help them match the RL properties to their local databases.

"Current Property Address" -- This address will always be the most recent address known for a property. If an address update was submitted previously and processed, it will be shown in this section.

"Previous Property Address" -- This is the second most recent address for a repetitive loss property. There is no need to modify this address field. It is shown here and on subsequent listings only for informational and comparison purposes. This is so you can see the current or revised address and community ID number vs. the previous address and community ID number. The previous address may also help you locate the structure.

"Last Claimant" --The data shown here is the name of the insured that reported the latest claim for the property, and may or may not be the current owner. This data is provided for informational purposes only in an effort to help you locate the property. This data is historical and cannot be updated. Therefore, if this is the only discrepancy you detect or the only entry in need of update, there is no need to submit the AW-501 worksheet for processing.

"Insured" -- If FEMA records indicate this property is currently insured under the NFIP, a "YES" will be shown in this field and the current name associated with the related Policy will be shown in the Named Insured section. Once again, the current insured name is only for informational purposes and is not intended for you to update. If however you believe that a property is misidentified as uninsured when in fact it is insured, you may wish to call that to our attention. Provide as much information as possible in the additional comments section on the current insured's name and/or possible alternate address or community identification number that the existing policy may be written under.

"Dates of Losses" - The dates are shown as year/month/day. For example, January 14, 2005, would be shown 05/01/14. If there are indications that the loss history reported for the property may be inaccurate, please call this to our attention. For missing claims or a claims history that may include more than one separately insured building, provide (in the Comments section of the form or as a separate document) all pertinent information such as date of missing claim, name of additional claimant, address of missing claim or information on the number of buildings on the site or address that brings in to question the claim record validity.

SELECTING AND DOCUMENTING UPDATES

REQUESTED UPDATES

* **INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY:** Before selecting this update it is expected that the address information provided will have been thoroughly researched including the claimant name and/or the current insured name. The claimant name provided is associated with the last reported loss for the property. It may or may not be the current property owner or may have been a past renter or occupant of the property. Possible sources of additional information that may help you identify the current property address are local tax records for the years of the claims, current and prior phone books, utility records, and the U.S. Postal Service. In addition, name search engines on the Internet may be useful in locating a current phone number or address for the name provided. You can also talk to long-time citizens of your community to see if they can assist you in identifying the correct address of the flooded property.

Please describe the investigative steps you took to locate the property in the Comments section of the worksheet. AW-501s for properties previously updated using this selection are annotated to reflect the update by displaying in the Comments section: "`Previously updated - this property is no longer considered a RL property. Updated as - Unable to locate.`"

Previous versions of the AW-501 may not have contained the claimant or insured name. If you were previously unable to locate the property, and are now seeing the name of the last claimant or current insured for the first time, please take the time to try to locate the property again using the newly provided information.

*** COSMETIC CHANGES REQUIRED TO THE ADDRESS:** Use this area to correct misspellings or street suffixes, to provide newly established address information, or to include "Local Property Identifier" information that meets your community needs. To better help you locate these addresses; we have provided the policyholder name associated with the last reported claim. The last claimant name associated with the insured location will change automatically if a future claim is paid to a new insured. In addition, if currently insured the name associated with the most recent policy is also provided. Please do not submit forms for which the only update is the spelling or accuracy of the claimant or insured name provided. Since this is an historical record, we are unable to make these types of updates. The names will be updated automatically, in the event of any future reported claims or changes of the named insured.

* **PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION:** If in using the information provided, you have positively identified the RL Property, and have determined that the building is not located in the community to which it is currently assigned, please provide the correct community name and NFIP Community ID number in the spaces provided. It is critical that the correct community name including county and the NFIP community ID number be provided. Without this information, the property will remain assigned to the community currently identified on the listing of RL Properties. If necessary, to assist the newly assigned community in locating the building, please make any known cosmetic changes required to the address (see above) as well.

* **FLOOD PROTECTION PROVIDED:** Select this update only if some type of structural intervention has occurred to either the building, property or the source of flooding that would provide protection to the building from those types of flooding events that have occurred in the past. You also must provide the Mitigation Action Codes (a-f) and the Mitigation Funding Codes (j-w) that best describes the mitigation project. These codes are included in a separate file on the CD. Please include all available documentation with the RL Update Worksheet (AW-501) that supports the mitigation action taken along with any evidence available that indicates the mitigation was effective. It will also be necessary to provide a copy of a recent Elevation Certificate if the building was retrofitted or replaced. **If the property was previously updated in this manner and the Mitigation Codes are not shown or are incorrect, you must provide the appropriate codes. This will avoid the update from being removed in the future.**

* **NO BUILDING ON PROPERTY:** Select this update only if the building in question can be positively identified as the previously flooded building and documentation is available to support that as a result of acquisition, relocation or demolition, an insurable building no longer exists at this location. You also must provide the Mitigation Action Codes (g-i) and Mitigation Funding Codes (j-w) that best describe the mitigation project. These codes are included in a separate file on the CD. Please include all available documentation with the RL Update Worksheet (AW-501) that supports the mitigation action taken. If the property was previously updated in this manner as a result of a non FEMA funded mitigation action and has since been replaced by a new elevated or floodproofed building, it will be necessary to select the **FLOOD PROTECTION PROVIDED** update described above and provide the new applicable Mitigation Action and Funding Codes. **Also, if the property was previously updated in this manner and the Mitigation Codes are not shown or are incorrect, you must provide the appropriate codes. This will avoid the update from being removed in the future.**

Please note that if the mitigation action was primarily federally funded, it probably did not cover the entire cost of mitigation; consequently, a secondary funding code is required.

FLOOD PROTECTION PROVIDED and NO BUILDING ON PROPERTY are two categories that generally describe why a property is no longer subject to the types of events that caused the original flooding. If either of these two updates are selected and properly documented, future worksheets will show the following statement in the additional comments section: ***"PREVIOUSLY UPDATED – THIS PROPERTY IS NO LONGER CONSIDERED A RL PROPERTY,"*** *and a bold* ***"X"*** *will be placed adjacent to the appropriate update. However, since the property did historically suffer the loss, the property will remain on the master repetitive loss list (even though the problem has been reported as corrected). If another claim is reported, the update will automatically be removed and the property will once again be considered a repetitive loss property.*

* **DUPLICATE LISTING WITH RL NUMBER _____:** If you identify two or more (AW-501) worksheets with separate address listings that are for the same building, use this update to identify all identical listings so they can be combined. On each worksheet that is a duplicate property, list all other RL or property locator numbers that are a duplicate to that property. To ensure the proper processing of this type of update, please provide all duplicate listing worksheets, for each location, together. Also, please identify the appropriate address to use for the creation of the new listing. Remember, if any of the loss dates for the two or more properties are the same, it is not likely that they are a true duplicate listing. It is more likely that there is more than one insurable building on the site that has suffered repetitive claims. Please investigate the possibility of multiple buildings before requesting this update.

* **HISTORIC BUILDING:** Choose this update if the property identified on the worksheet has been designated as a "Historical Building" on either a State or National Historic Registry. Please provide any appropriate documentation available to support this update.

* **COMMENTS SECTION:** Use this area to provide comments on any of the above updates or to explain a situation that does not fit into one of the above update fields.

DOCUMENTATION REQUIREMENTS

Several of the potential updates require that documentation be provided to support the claim of mitigation or to confirm the address or location of the subject building. The following provides additional clarification on the various types of mitigation actions and the type of documentation that would likely be acceptable in verifying and approving the requested update.

ELEVATION OR DEMOLITION AND REBUILDING – The most appropriate documentation for this type of mitigation is an accurately completed FEMA Elevation Certificate (EC) based on finished construction showing that either the lowest floor or the bottom of lowest horizontal structural member, if applicable and accompanying machinery is at or above the 100 year base flood elevation. In addition if applicable, the EC must show that the area below the next higher floor is constructed in a manner consistent with Federal and local floodplain regulations pertaining to the number and size of openings allowing the entry and exit of flood waters.

ACQUISITION/DEMOLITION – Appropriate documentation for this type of mitigation action would consist of a demolition permit issued by the community, local property tax records showing no improvements on the lot, photos of the vacated site and/or written statements from the community official, (on community letterhead), explaining the circumstances under which the property was cleared. A certified deed that shows the transfer of ownership of the property to the community and the open space use requirements provided for under all FEMA grant programs would also be acceptable.

ACQUISITION/RELOCATION – Documentation, similar to that specified above for acquisition/demolition, is required to verify the removal of the structure. A building permit and/or FEMA EC for the new structure showing that it was constructed either outside the special flood hazard area (SFHA) or, in accordance with Federal and local floodplain regulations would also be necessary.

FLOODPROOFING – This mitigation measure is usually reserved for non-residential structures. Verification would consist of an accurately completed FEMA Floodproofing Certificate showing the building as floodproofed to the base flood elevation. However, any projects that require human intervention will be closely reviewed. In communities approved for residential basement floodproofing, an accurately completed FEMA Residential Basement Floodproofing Certificate is required for new construction in the SFHA.

DRAINAGE IMPROVEMENTS – A thorough description of the improvements and their intended effect is required. The descriptions should include what was done and when, why the action taken was chosen, the previous and new level of protection and any evidence of the effectiveness of the project such as an analysis of how the system performed during a recent weather event. Letters from the community official in charge of the project that answers these questions and provides examples of the scope and nature of the project such as plans would help to support the approval of this flood protection action. In some cases a Letter of Map Revision (LOMR) based on the project is requested of and prepared by FEMA. In those instances providing a copy of the LOMR clearly showing the subject property in the amended area and out of the SFHA would suffice for documentation of this mitigation action.

The above actions represent mitigation actions that fully protect a structure from flooding up to and including the base flood elevation. Several repetitive loss properties are flooded simply as a result of more frequent, less severe events. For mitigation actions between the 25-year and 99-year protection levels, a "conditional" partial protection level will be assigned only with supporting data as certified by a design professional and or a community official that includes sufficient engineering data to demonstrate that at least 25-year protection has been provided. However, should another loss occur, we reserve the right to reevaluate the "conditional" approval and the property may be placed back into repetitive loss status. Property will be "conditionally" mitigated if evidence is supplied that the project meets the flood

protection level of the 25-year through 99-year recurrence events and the specific property is cited as being protected by the project. Examples of allowable protection projects include channelizations, culvert enlargements, retention/detention ponds etc.

The typical documentation required would consist of letters from the community; copies of the previous and revised Flood Insurance Rate Maps (FIRM) with property location shown indicating that the property was in the SFHA and is now removed; an engineering analysis provided by the community that demonstrates the level of protection provided; receipts from contractors; copies of FMA or HMGP documentation, if available for individual properties protected by a project.

LEGAL DESCRIPTIONS – Several property records in the RL database are known only by a "legal description". If the documentation submitted for the mitigation project, as described above, now references a mailing or "group one" address as provided by the U. S. Postal Service, documentation to support that the "group one" address and the legal description listed currently are one and the same, is required. Tax records showing both a legal description and a local mailing address would suffice for documentation of this criterion.

SUBMITTING UPDATES

UPDATES AUTHORIZED BY: When submitting NFIP Repetitive Loss Update Worksheets (AW-501) in paper format by mail or fax, the RL Transmittal Sheet must be filled out, signed, and accompany the requested updates. When submitting updates by electronic methods, the RL Transmittal sheet must be filled out and accompany the submittal but the electronic signature on the email may be used for the authorizing signature. Any AW-501 updates submitted without a signed RL Transmittal Sheet will not be processed until the signed Transmittal Sheet is provided.

FEMA appreciates your support and assistance in providing this information. You may be contacted in the future if we have any questions concerning your updates.

Under the Privacy Act (5 U.S.C. 552a), personal identifiers, such as names, may be used only for limited purposes. One of the allowable uses of names and flood insurance policy numbers is to analyze the effectiveness of local flood loss reduction efforts. Communities may use personal identifiers for this purpose only and are prohibited from using them for solicitation, or other reasons.

Federal Emergency Management Agency
National Flood Insurance Program

OMB #1660-0022 EXPIRES February 28, 2005

NFIP REPETITIVE LOSS UPDATE WORKSHEET (AW-501)

THE INFORMATION ON THIS FORM IS BASED ON CLAIMS ON OR BEFORE: mm/dd/yy

REPETITIVE LOSS NUMBER:

Internal Use Only ☐ **A** ☐ **N/A** ☐ **FRR**

NFIP COMMUNITY NAME:	**CID#:**
LOCAL PROPERTY IDENTIFIER:	

CURRENT PROPERTY ADDRESS	**PREVIOUS PROPERTY ADDRESS/COMMUNITY ID #**
LAST CLAIMANT:	

INSURED:	**NAMED INSURED:**

DATES OF LOSSES:					**TOTAL NUMBER OF LOSSES FOR PROPERTY:**			

REQUESTED UPDATES

MARK ALL UPDATES BELOW THAT APPLY (IMPORTANT – SEE INSTRUCTIONS)

1. ☐ INFORMATION PROVIDED NOT SUFFICIENT TO IDENTIFY PROPERTY.
   Choose this update if all attempts to locate the property fail. Please describe the steps you took to locate the property in the comments section below.

2. ☐ COSMETIC CHANGES REQUIRED TO THE ADDRESS:
   Update the address shown above and/or add your local alternative property identifier such as Tax Assessor #.

3. ☐ PROPERTY NOT IN OUR COMMUNITY OR JURISDICTION:
   Choose this update if you have positively determined that the property shown is not located in your community. Please provide the correct NFIP community name and if known the NFIP Community ID Number. If available, please attach a map showing the property location.

   ASSIGN TO NFIP COMMUNITY NAME: _____ NFIP COMMUNITY ID # _____

4. ☐ FLOOD PROTECTION PROVIDED.
   Choose this update only if some type of structural intervention has occurred to the building, property or the source of flooding that protects the building from future events similar to those that occurred in the past. The correction must be supported by documentation such as an Elevation Certificate and the Mitigation action and funding information below must be provided.

   Mitigation Action 1.) ☐ **Source of Primary Mitigation Funding 3**.) ☐ **Secondary Source of Funding 3**.) ☐

5. ☐ NO BUILDING ON PROPERTY.
   Choose this update only if the property in question can be positively identified as the site of the previously flooded building and documentation is available to support that an insurable building no longer exists at this site. The correction must be supported by documentation such as a Demolition or Relocation Permit and the Mitigation information below must be provided.

   Mitigation Action 2.) ☐ **Source of Primary Mitigation Funding 3**.) ☐ **Secondary Source of Funding 3**.) ☐

   See Appropriate Mitigation Action and Funding Codes

6. ☐ DUPLICATE LISTING WITH RL NUMBER: _____ COMBINE AS ONE LISTING.
   Choose this update to identify two or more separate listings that are for the same building. List all other RL numbers that are duplicates to this property. Please indicate which address shown is the correct address to use.

7. ☐ HISTORIC BUILDING: Choose this update if you know the building is listed on a State or National Historic Registry.

COMMENTS SECTION: _____

A SIGNED RL TRANSMITTAL SHEET MUST ACCOMPANY THIS FORM FOR APPROVAL OF THE UPDATE!

MITIGATION ACTION CODES

1.) If you selected "FLOOD PROTECTION PROVIDED," please enter the letter below (a –f) that best describes the situation:

a. The building was elevated to or above the Base Flood Elevation (BFE).
b. The building was elevated but not to the BFE.
c. The building (non-residential) was floodproofed to the BFE.
d. The building was partially floodproofed (but, not to the BFE).
e. The building was protected by a flood control/stormwater management project.
f. The building was replaced by a new elevated/floodproofed building.

2.) If you selected "NO BUILDING ON PROPERTY," please enter the letter below (g – i) that best describes the situation.

g. The building was demolished, but not acquired through any program.
h. The building was acquired and demolished as part of a program.
i. The building was relocated out of the floodplain.

MITIGATION FUNDING CODES

3.) Please choose from the following (j – w) to identify the primary and secondary funding sources for the mitigation action described by a – i above.

FEMA PROGRAM FUNDING SOURCES	**NON-FEMA FUNDING SOURCES**
j. Hazard Mitigation Grant Program (HMGP). k. Flood Mitigation Assistance Program (FMA). l. Pre-Disaster Mitigation Grant Program (PDM). m. Section 1362 Acquisition Program. n. Other FEMA Programs	o. Increased Cost of Compliance (ICC) coverage. p. U.S. Housing & Urban Development (HUD) Community Development Block Grant (CDBG). q. U.S. Army Corps of Engineers or Natural Resources Conservation Service (NRCS) Project. r. Other Federal Program. s. State Program. t. Local Program. u. Property Owner v. Natural Disaster or Fire. w. Unknown

OMB Statement: The CRS Application worksheets, the CRS Coordinator's Manual, and this form have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork reduction Act of 1980 as amended, 44 U.S.C. 3501 et seq. And assigned OMB control number 3067–0195. Public reporting burden for the CRS is estimated to average 30 hours. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing all CRS forms. Send comments regarding the burden estimate or any aspect of the application, including suggestions for reducing the burden to: Information Collections Management, Federal Office of Management and Budget, Paperwork Reduction Project (3067–0195) WASHINGTON, DC 20503

Privacy Act: Under the Privacy Act (5 U.S.C.552a), personal identifiers, such as names, may be used only for limited purposes. One of the allowable uses of names and flood insurance policy numbers is to analyze the effectiveness of local flood loss reduction efforts. Communities may use personal identifiers for this purpose only and are prohibited from using them for solicitation, or other reasons.

COMMUNITY NAME: _____ COMMUNITY ID#_____

FEMA

TRANSMITTAL SHEET
NFIP REPETITIVE LOSS (RL) UPDATE WORKSHEETS

PLEASE NOTE: WE CANNOT APPROVE YOUR AW-501 RL UPDATE WORKSHEETS, UNLESS YOU RETURN THIS SIGNED DOCUMENT.

Contact Information: Please provide the following information should we should need to contact your community for more information to approve your updates.

Name: _____

Address: _____

_____

Phone: _____Fax: _____

E-mail: _____

IF YOU HAVE ANY QUESTIONS ON HOW TO UPDATE THE WORKSHEETS OR WHERE TO SEND THEM CALL:
MR. GABE GAMBRILL AT (904) 280-1268
OR E-mail: *hgambrill@iso.com*

Please, indicate the number of RL Update Worksheets you are submitting for this update! _____

Please check all that apply

We have returned new updated worksheets OR ones that previously did not have the necessary Mitigation Action/Funding Source codes.

We have attached documentation to support our updates for Building Removal and Flood Protection Provided.

Mitigation Action/Funding Source codes have been provided, as appropriate.

We have described the steps taken to locate any properties that we were unable to identify from the Information provided.

We have retained copies of all the worksheets we submitted.

UPDATES AUTHORIZED BY: (*THIS FORM MUST BE SIGNED BY A COMMUNITY OFFICIAL*)

_____

PRINT NAME AND TITLE **SIGNATURE** **DATE**

MAIL YOUR UPDATED RL WORKSHEETS AND THIS RL TRANSMITTAL SHEET TO:

NFIP REPETITVE LOSS UPDATES
c/o Mr. Gabe Gambrill, AIS, CFM
ISO, Inc.
Post Office Box 3085
Ponte Vedra Beach, FL 32004-3085
Phone: 904-280-1268 Fax: 904-285-9350

SAVE TIME

WHEN SUBMITTING REPETITIVE LOSS UPDATES

STATE the nature of the address problem and steps taken to identify the property for Information Provided Not Sufficient To Identify Property.

ATTACH supporting documentation and include the Mitigation Action and Funding Codes when you select Flood Protection Provided or No Building On Property.

PROVIDE the name of the community where the property is located if the property is Not in your Community.

INCLUDE any missing or incorrect mitigation codes to previously updated listings.

EXCLUDE AW-501s that do not need updates.

AUTHORIZE your update by signing and dating the "Repetitive Loss Transmittal Sheet" provided or include a signed cover letter authorizing the updates.

See enclosed *2005 Instructions For Completing The NFIP Repetitive Loss (RL) Update AW 501 Worksheet* for complete instructions.

NFIP Repetitive Loss Updates
c/o Mr. Gabe Gambrill, AIS, CFM
ISO, Inc.
Post Office Box 3085
Ponte Vedra Beach, FL 32004-3085
Phone: (904) 280-1268 Fax: 904-285-9350